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# Abstract

## **Beyond Nelson: A Post-heroic Study of Leader-Follower Interaction in the Royal Navy**

Matt Offord

Leadership studies have traditionally considered leader characteristics to account for leadership outcomes such as leader emergence or team performance. This heroic narrative has always had its opponents but recently a post-heroic approach is becoming more prominent. Post-heroic approaches contest the assertion that leadership outcomes are mainly the product of leader traits. My research begins with a particular leader trait, the ability to interact, and bridges the two approaches by investigating the process from leader competence to leadership outcomes. The research uses a sequential exploratory design incorporating mixed methods.

Three projects were conducted in Royal Navy (RN) warships. A qualitative project developed a leader-follower interaction model. The model suggests that leadership is granted by followers after a long-term series of mundane encounters. These encounters allow followers to build a group consensus of leader prestige. Prestige influences follower behaviour such as engagement, disengagement and a covert form of resistance called levelling. A second project mapped the advice and participation networks on RN vessels and determined the prestige of team and sub-team leaders. Regression techniques allowed me to verify empirically the significant relationship between prestige scores and team performance for ships conducting Sea Training. A final project conducted on a warship in the South Atlantic verified a similar relationship between advice network prestige and intra-team communication. Finally I used the findings of the two empirical projects, based on sub-team or dyadic relationships, to model the effects of prestige at the group level, using computer simulation.

I discovered that prestige that is dispersed throughout a group generates more effective teams, in terms of communication, than other conditions. This challenges the traditional top-down view of leadership communication. The resulting leader-follower interaction model describes a series of mundane and contested encounters through which prestige is given to dispersed leaders within a group. The theoretical impact of my research is to develop trait-process approaches to leadership and to describe leader-follower interaction as a post-heroic process. In doing so, I synthesise engagement theory with anthropological approaches, including resistance to leadership. Practically, my projects validate the RN's competency method of selecting leaders but points out that prestigious leaders alone cannot maximise team performance.

# Beyond Nelson: A Post-heroic Study of Leader-Follower Interaction in the Royal Navy

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Thesis presented for the degree of  
Doctor of Philosophy



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# Declaration

I hereby declare that the material in this thesis has not been previously submitted for a degree in this or any other university. I further declare that this thesis is solely based on my own research.

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Matt Offord

The copyright of this thesis rests with the author. No quotation from it should be published without the author's prior written consent and information derived from it should be acknowledged.

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# Dedication

In memory of Commander Kenneth Ian MacDonald ("Kim") Clark Royal Navy (1958 - 2015) who encouraged me to study sea command and set me upon this path 6 years ago. His last words to me were "Keep going forward."; I am obeying the last order!

## Part I

# Part I: Background

# Chapter 1

## Introduction

*Every executive Officer in a ship is undergoing initiation - preparation for command himself.*

Source: Your Ship - Notes and advice to an officer on assuming his first command (1944).(Lavery, 2007: 100)

### Overview

*This chapter will orientate the reader to the reasons to concentrate on leader-follower interaction instead of leader-centric theory. This perspective is theoretical and also based on my own experiences. Research aims and questions are introduced to establish a theme for the entire thesis. I will then introduce my use of mixed methods and my cross-disciplinary approach; justifying both paradigms in terms of the research aims. Having discussed the context for my research on board Royal Navy warships, I will complete this section with an overview of the thesis structure.*

## 1.1 Reasons to study leadership interaction

### 1.1.1 Theoretical reasons to research leadership interaction

Almost 70 years ago a prominent leadership scholar, Ralph Stogdill, conducted a review of leadership theory (Stogdill, 1948) which challenged assumptions made by scholars since antiquity. His review suggested that taken for granted leadership traits did not sufficiently predict leadership outcomes. Either the lists of leadership qualities that everyone was working from were wrong, or maybe traits did not define leaders at all. This appeared to be the beginning of the end for the traditional approach to leadership studies. Traditional approaches based on leaders' traits seemed to be unbalanced. Followers were assumed to have little agency of their own.

Attempts were made over the following 50 years or so to fill the gap left by leadership trait theories. However these also failed to achieve sufficient empirical support. More recently post-heroic approaches have emphasised the role of followers and the interaction between leaders and followers. Traits have also regained some of their earlier importance by considering leadership traits as

antecedents of leader and follower behaviour and subsequent leadership outcomes. Now known as trait processes of leadership, these approaches also account for followers and interaction as well as leaders. Using a similar approach, the research described in this thesis focuses on a single competence as an antecedent of the leadership process. This competence is the ability for leaders to interact successfully with followers. It is one of the competencies used to select commanding officers of warships in the Royal Navy (RN). In this context I used a mixed methods, cross disciplinary and post-heroic approach to trace a dynamic process of leader-follower interactions and leadership outcomes.

My research shows that leaders' traits do not explain the whole process of group coordination. Interaction between leaders and followers develops leader prestige. My research demonstrates that prestige *can* affect leadership outcomes.

### **1.1.2 Personal reasons for researching leadership interaction**

Over a decade ago I was the second-in-command of an RN warship in a minefield near the Al-Faw peninsula of southern Iraq. At that time the vessel's mission, along with other coalition mine-clearance vessels, was to make the Kwa Abd Allah waterway safe as far as the southern port of Um Qasr, in order to supply that area with humanitarian aid. Iraqis in the vicinity were starving in the war that had ensued following the invasion of Iraq in 2003. Our vessel had the dubious honour of being the first "mine-hunter" in the minefield because she had earned a reputation for efficiency over the preceding months whilst preparing for Operation Telic.

The Commanding Officer of the mine-hunter, HMS Brocklesby, was extremely effective and held in high regard. He earned the Distinguished Service Cross for his actions during the campaign. Commander Phil Ireland DSC Royal Navy also believed that he had been blessed with a remarkable crew and I had to agree. There was something special about HMS Brocklesby, something that I resolved to discover. Was the enthusiasm of the Ship's Company solely a product of a single leader as is generally believed in the military? How might effective leaders perform with poor teams and vice versa?

Therefore, having studied leadership for an MBA I returned my focus to the interaction between leaders and followers. Inspired by HMS Brocklesby I resolved to define how beneficial interaction affects team cohesion and performance.

### **1.1.3 Research aims**

The aim of this research was to understand how both leaders and followers create leadership outcomes. The necessity to account for both groups in a study of leadership may seem counter-intuitive; discourse about leadership tends to focus solely on leaders. The brief discussion of the problems which arise in leader-centric approaches (above) however, illustrates that intuition may be misleading if preferred to leadership research. This will be discussed in much greater detail in Chapter 2. It is sufficient to say at this stage that there is a research gap in leadership studies. There has been too little research into follower behaviour in the leadership process, and that bias towards leaders has prevented a full understanding of the leadership process. My own personal experience, described

in the paragraph above, also caused me to consider both leaders and followers in studying leadership.

To study leaders and followers is to study interaction. Clearly the encounters between leaders and followers determine the outcome of group activity. Therefore leaders matter and in the post-heroic tradition followers matter too. If this is the case, interaction must be the crucial process when leadership happens. As a naval officer I was well positioned with access to RN personnel to conduct a research project based on interaction.

The RN switched to a competence framework for the selection of commanding officers of warships in 2009 (Navy, 2011a; Tate, 2009). The competence most highly correlated with team performance is called *interact* (Young and Dulewicz, 2008). I selected this framework and the *interact* competence specifically as the start point for my research. In order to understand how interactions occur it was necessary to explore the dynamics of leadership interaction.

The following research questions are posited:

1. What modes of interaction are most effective in leadership emergence?
2. What modes of interaction are most likely to improve team performance?
3. How do effective modes of interaction actually lead to better teamwork?

These are the questions posed in the first project and, although they guide the research throughout, they are supplemented by new hypotheses in the subsequent projects. The questions are answered fully in Part III (Contribution).

## 1.2 Mixed methods

Researchers usually choose between a quantitative or a qualitative approach. Both methods have inherent limitations; mixed methods are able to mitigate the shortfalls of both frameworks (Creswell, 2009: 203). Because of this mixed methods are growing in popularity, becoming a natural development in research techniques (*Ibid.*). There is more to be gained from the blending of the two modes of research than by either one on its own (*Ibid.*).

I have selected a sequential exploratory research design (Creswell, 2009: 206). This means that the first project is qualitative to explore the subject area. To explore interaction as a dynamic process I used focus groups, allowing interaction to be defined from a follower perspective. The research switches to a positivistic paradigm to test the hypotheses which arise from project 1. Projects 2 and 3 are quantitative in order to test the findings. This allows the research to develop deep but highly contextual insights, then test the most important aspects in a reproducible and transferable manner. A full discussion of the reliability and validity of these methods are discussed at the Summary at Chapter 8. The structure of both the research design and this thesis are displayed at Figure 3.1

I use a wide range of methods to achieve the exploratory research design. Beginning with grounded theory and focus groups in project 1, the methodology incorporates social network analysis to measure prestige in project 2. The hypotheses are tested using logistic regression to account

# Leadership interaction research project (sequential exploratory design)

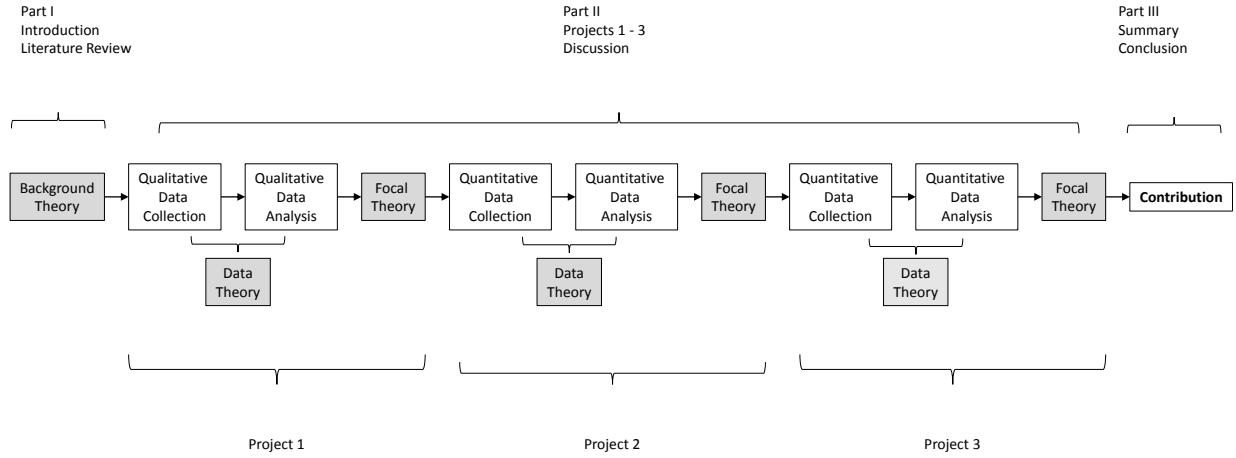


Figure 1.1: Thesis structure based on mixed methods research design.

for a binary outcome. This research design is repeated in project 3 but with a different dependent variable. Computer simulation is used in the discussion at Chapter 8 to draw out consequences of simple interaction rules at a group level. The use of simulation is a crucial step in demonstrating the multi-level applications of the leadership interaction process model which I developed from the research.

## 1.3 Cross-disciplinary research

The leader-centric bias in leadership studies has left a research gap concerning the interaction between followers and leaders. While exploring this gap in project 1, two phenomena emerged which are not a part of mainstream leadership research: prestige and resistance. The study of resistance in leadership research is embryonic (Collinson, 2012) but it is far more mature in psychology, sociology and anthropology. I have delved into anthropological theories of resistance to leadership to create a more rational and complete model of resistance. Prestige features in leadership studies but again anthropological theory is richer. Specifically prestige biases in information transmission and other tangible leadership outcomes are well developed with mature methodological instruments in evolutionary anthropology. As a result both focal and data theory are from both leadership studies and anthropology. The use of computer simulations, although becoming more popular in every field, may be seen as unusual in leadership studies. However simulation is an ideal tool for demonstrating the emergence of higher level behaviour from simple interactions. This technique is helpful to discuss the implications of my research.

## 1.4 Research context - the Royal Navy

I conducted my research in RN vessels. This is largely because I had access to this environment and strong support for the research on warships both from participants and from senior officers. The RN also offers some advantages. The natural boundary between a crew (called the Ship's Company) is ideal in social network research for example. I also found the sailors to be extremely honest when allowing me to collect reliable data. The extreme nature and isolation of RN Ship's Companies also make leadership of paramount importance and easier to observe. In this section I will briefly describe the RN in order to orientate the reader to the context.

The modern RN is a relatively small organisation of around 30 000 men and women (DASA, 2016). It operates warships, submarines, aircraft and marines around the world. There are currently 76 ships operating in the RN (Navy, 2010) ranging from nuclear submarines to small launches.

Naval forces were first used in England in the ninth century and the RN was formed in 1660. Despite this the RN is a very modern organisation and attempts to reflect the society that it draws from. The RN was rated as a top ten employer on the Stonewall Index in 2016, for example (Stonewall campaigns for the equality of lesbian, gay, bisexual and trans people across Britain). The workforce is mostly male with 12 percent females, it is also predominantly white with 3.5 percent ethnic minorities (DASA, 2016). The workforce is professionally diverse and specialised. At the same time the nature of working at sea erodes the divisions between trades, prioritising teamwork and tolerance. The environment at sea is frequently tough and challenging, deployments are typically 6 - 9 months in length. Therefore separation from families is a constant feature of life in the RN. Operations are high tempo with considerable manpower churn caused by frequent changes in employment. New assignments are received every 2-4 years primarily to assist career development and promotion. This results in an ever changing workforce where inexperience in new roles is balanced by the use of standardised procedures and behaviour. This is supported through the Divisional System of pastoral and professional support alongside a hierarchical and disciplined work culture

The vessels used for the research were Mine Countermeasures Vessels (MCMVs) and Off-shore Patrol Vessels (OPVs). Both types of vessel train at the Naval Base in Faslane near Glasgow. During these periods of sea-training the ships are given extremely challenging tasks by instructors called "sea-riders" who then assess and train the teams collectively. As a sea-rider myself I had access to these vessels during these times as well as access to the written assessments of their performance. The MCMVs are small vessels with about 40 personnel on each. Eight of these vessels were used for the research. I collected data from the OPV in the Falkland Islands for project 3. This is a larger vessel but it also has about 40 personnel. In both cases the Ships' Companies are tightly knit and professional groups working in challenging and sometimes dangerous conditions.

The RN takes a pride in its leadership training, reckoning it to be world class. Leadership development spans entire careers, building new approaches appropriate to career stages. Leadership techniques feature heavily in decision making and strategic tools. Annual appraisals of service men

and women include leadership assessments; these are vital for promotion. The RN sees leadership as a vital tool in getting things done:

*“Military leadership is the projection of personality and character to get subordinates to do what is required of them...”* (Navy, 2011b: 174)

The art of getting things done is a common way in which leadership is referred to in the RN. In this sense leadership is stripped of romantic notions and reduced to the status of a tool, albeit an indispensable one. For example, the RN uses simple but effective leadership tools such as the Maritime Tactical Estimate, to aid in decision making (St George, 2012: 29). Another example is the use of Adair’s Action Centred Leadership (ACL) mantra: ‘task, team, individual’ to assist leaders in balancing task and situational challenges (Adair, 1973).

Professor Andrew St George, in his book about RN leadership, states the RN leadership conception includes moral and ethical dimensions (St George, 2012: 9). The RN has published six core values (commitment, courage, discipline, respect for others, integrity and loyalty). These are used throughout the RN to guide behaviour. Leadership is considered by the RN to be strongly supported by the six core values in addition to leadership qualities. These values are clearly moral and ethical in nature and St George claims they may even feature a spiritual aspect (St George, 2012: 9) (*loc. cit.*). Promoting shared values is one of six core themes and practices in effective leadership (Gill, 2011: 162).

## 1.5 Thesis structure

To structure the thesis I have used the format described by Phillips and Pugh (2005). I have split the thesis into three parts to isolate different types of theory which will help to orientate the reader. Part I concerns background theory. This contains the introduction and the literature review. The purpose of this part is to explain my interest in interaction from a leadership theoretical point of view. The literature review at Chapter 2 gives more detail about the research gaps in leadership theory concerning leader-follower interaction as well as an overview of leadership theory. A broad description of leadership theory is necessary to demonstrate the problems with traditional approaches and my reason for adopting a post-heroic approach. Additionally the literature review includes some cross-disciplinary theory where it is appropriate. I deem it appropriate to use theory from alternative disciplines where leadership theory is insufficient. Examples are descriptions of prestige and resistance. I have also primed the reader for some of the emergent theory (or focal theory) by introducing it in the literature review.

Part II deals with focal and data theory. Focal theory is theory which emerges from the research projects (Phillips and Pugh, 2005: 60) and ultimately forms my contribution to knowledge. This part deals with each project in turn with a short introductory chapter to discuss the Sequential Exploratory Design used in my research. Subsequent chapters will introduce new focal theory in the results but also new data theory in the methodology. I have introduced new theory in each of the appropriate chapters rather than discuss all of the theory at the beginning. This is simply to make each chapter more accessible by discussing theory as it is required.



Chapter 4 covers the first project. As this project was published with my supervisors Professor Gill and Dr. Kendal, I have included the article (Offord et al., 2016) in this chapter. Chapters 5 and 6 relate to Projects 2 and 3 respectively. The final chapter in Part II is a discussion of the projects and how they relate to each other and to the research questions. The aim of this discussion is to create a discourse on the subject of leadership interaction which draws on the conclusions of each project. This discourse will sum up the dynamics of leadership interaction and describe a process beginning with the *interact* competence and ending with leadership outcomes. This is the leadership interaction process model and it is the culmination of the three projects. Using computer simulation I demonstrate how this model leads from individual to dyadic to sub-team and finally group behaviours. I also point out that leadership traits cannot reliably predict leadership outcomes but prestige can do so.

The final part discusses my contribution to theory. That is how the background theory and focal theory have been changed by my findings. This is split into a summary where I defend my methodological choices, highlighting the strengths and weaknesses of my mixed-methods approach. The summary also contains directions for future research based on my findings. I also describe the contribution of my findings to a specific area of leadership: trait process theories. The conclusion takes a broader view and discusses the consequences of the leader-follower interaction model for leadership research. There are also implications for leadership development and for practice; these are also discussed.

## Chapter 2

# Literature review - Leadership studies from the heroic to the post-heroic eras

*There are three essentials to leadership: humanity, clarity and courage.*

Source: Zen Lessons (Early Song Dynasty (c.12th Century)). (Cleary, 1993: 15)

### Overview

*The aim of this chapter is not only to give a brief overview of leadership theory and discuss the reasons for adopting a post-heroic approach; I will also justify the use of theory from anthropology to create a cross-disciplinary research design. I cannot cover all leadership theory concisely so this chapter contains a brief narrative of heroic leadership paradigms from the Great Man theories to Transformational Leadership. I will then outline the problems with these approaches using Romance of Leadership (RoL) theory. Having established that leader-follower interaction processes are a promising mode of enquiry for my research, I outline theory from leadership studies and anthropology which could successfully improve our understanding of leadership processes. These theories include Evolutionary Leadership Theory (ELT), resistance, levelling and prestige theories.*

### 2.1 Introduction

The quote above shows that defining leadership qualities has been the traditional way to study leadership. In fact trait theories of leadership date back to at least 500 BC (Gill, 2011: 63). These "Great Man" theories are heroic in nature, they assume differences in leaders which cause leadership outcomes such as improved team performance (*Ibid.*). Trait theories have been dominant in leadership studies since this time but began to lose ground in the 1940s before recovering some of their appeal more recently in the form of trait-process theories.(DeRue et al., 2011; Zaccaro, 2007; Antonakis et al., 2012). Trait theories were dealt a crushing blow in the 1940s by Stogdill's important review of traits(Stogdill, 1948). This was compounded in the 1970s when David McClelland wrote his seminal work (McClelland, 1973) discrediting IQ tests and their predictive ability.

Research based on traits lost its appeal and was replaced by competency frameworks, a more functional approach. Currently trait based theories of leadership have re-emerged while competency approaches appear to be preferred in managerial practice rather than in leadership research. More recently Transformational Leadership theories, those that study leaders who have enduring affect on their followers (Bass and Bass, 2008: 619), have become very popular. Transformational Leadership theories were a paradigm shift in leadership studies (*Ibid.*). There has also been a serious interest in looking beyond romantic notions of leadership; which credit a range of outcomes (such as organisational performance) to leaders without considering alternatives Meindl (1995).

The aim of this chapter is to describe the course of leadership studies from the “Great Man” theories, which were ubiquitous from early times and still hold great sway, to the post-heroic era. Despite the popularity of approaches which attempt to look beyond romantic notions of leadership, I will demonstrate that heroic leadership is still compelling to leadership scholars and practitioners alike. This chapter will not give an overview of all leadership theory since this would fill a large textbook. My research aim is to explore the gap between traditional leader-centric notions and one which accounts for follower behaviour. Having discussed heroic approaches, I will then move on to describe the development of heroic leadership to Transformational Leadership and then to describe recent alternatives: post-heroic theories. One such approach is evolutionary leadership theory (ELT). ELT is a cross-disciplinary approach incorporating psychology, leadership studies and anthropology. The approach of the latter truly departs from heroic concepts so I will discuss particular ideas from anthropology which may assist us to move beyond the heroic paradigm.

## 2.2 Trait theories

Trait theories of leadership are the most intuitive explanations of leader behaviour. Team performance as an outcome of leader effectiveness is such an apparently obvious condition that it was not challenged until very recently, having prevailed for over 2000 years. Plato’s Republic is often cited as an early example of trait theories of leadership. He does not deal explicitly with leadership but most of his discourse concerns the selection and training of leaders in his Utopian city. A list of personality traits is foremost in his discussions of the proposed guardians and founders (Lindsay, 1935). We do not need to confine ourselves to the ancient Greeks, Sun Tzu also discussed leadership traits 25 centuries ago (Gill, 2011: 63). Informally most modern discussions about leadership centre on traits. In the RN we talk about “OLQs” (Officer Like Qualities). It seems likely that most, if not all, cultures describe leaders in terms of traits. Probably they always have.

The trait theories from history are often considered Great Man theories because their narratives are generally masculine and heroic in nature. More precisely, Great Man theory was introduced by Thomas Carlyle in a series of public lectures in 1840 (Spector, 2015). Carlyle took the concept of heroic leadership to heights that would be inconceivable today claiming that Great Men were divine creatures commanding absolute submission (*Ibid.*). Carlyle’s Great Man proved to be an enduring paradigm but, unsurprisingly, it also attracted criticism. One such detractor was Herbert Spencer who considered the notion to be flawed by its lack of social context. According to Spencer it was the social environment rather than individual leadership which determined outcomes (Spector, 2015) (*op. cit.*). This argument is reminiscent of the thoroughly modern dialectic between heroic and

post-heroic discourses.

A somewhat more rigorous treatment of traits as individual differences in leaders began in the 20th century (Antonakis et al., 2012). Traits were catalogued which were measurable and stable, these being biological or psychological in nature (Antonakis et al., 2012; Dinh and Lord, 2012). There were many reasons for the demise of trait based approaches to leadership. Antonakis et al. (2012) ascribe a misinterpretation of the literature in the mid 20th century to lead scholars to believe that traits were not reliable predictors of leadership effectiveness. Fragmentation of trait research findings and personality theories compounded the issue further and some scholars found an implication that leaders are born to be problematic (*Ibid.*).

This fragmentation of theory is evident in Ralph Stogdill's attempt to synthesise all of the trait literature in 1948 (Stogdill, 1948). Stogdill succeeded in integrating the findings of over 120 studies of leadership traits. His work is often cited in reviews of leadership traits because hitherto the trait approach appeared to be fragmenting to the point of extinction. Stogdill found that some physical traits, such as age, did not exhibit the strong positive correlation with leadership that had been thought to exist (Stogdill, 1948). While height and weight exhibited a small positive correlation, other physical attributes (e.g. athleticism or appearance) did not appear to have any clear effect on leadership other than in certain situations (*Ibid.*). Even intelligence was questioned and certain constraints were added. Specifically Stogdill established that an IQ difference between leaders and followers is significant only if it is not too great (*Ibid.*).

Other traits, related to intelligence were considered: scholarship and knowledge. These exhibited a similar effect. Judgement and insight also seemed similar and were also related to intelligence by many leadership scholars (e.g. Bass and Bass (2008: 85)). Other traits studied were perhaps pre-cursors of the competency approach. For example originality and adaptability were found to be correlated with leadership (although few studies existed at the time). Both traits seem like a complex outcome of personality traits, capabilities and situational factors. I would call these traits competencies.

Attributes connected to willpower (initiative, persistence, ambition and industry) number among the long list of Stogdill's leadership traits. It is not at all surprising that all of these traits were associated with individuals in positions of leadership (Bass and Bass, 2008: 88-89). Since Stogdill's paper did much to determine the course of leadership studies (Lord et al., 1986), it is surprising to note that despite Stogdill's support for willpower it has hardly featured in research since (Karp, 2014). This has been for political reasons (*Ibid.*) but demonstrates the vulnerability of heroic leadership to changing ideology or even fashion.

Other personal qualities such as integrity, conviction and so on, were investigated and there was support for most positive personality attributes as was the case for positive emotions (e.g. humour) (Bass and Bass, 2008: 90-91). This again is not surprising but some aspects reflect on the fickle nature of trait based approaches. For example Stogdill found support for both self-control and excitability in his research (Stogdill, 1948). Leaders were also found to be generally from better socio-economic backgrounds. They were also found to participate to greater extent than others in sports and social activities, possibly relating to the earlier argument for extroversion. Social skills

and prestige were also related to leadership but anti-social activities (such as stealing) were also correlated (Bass and Bass, 2008: 92).

Some factors in Stogdill's research are of particular interest in the military context. Indeed a major contributor to his study was Jenkin's 1947 study of military leadership (*cf* Stogdill (1948)). I refer to the traits often considered to be of paramount importance in military leadership studies: extroversion and dominance. Extroversion is considered a necessary trait for military leadership (Wong et al., 2003). Both extroversion and dominance may be considered somewhat stereotypical traits for military leaders, the RN certainly encourages this view:

*"Military leadership is the projection of personality and character to get subordinates to do what is required of them..."* (Navy, 2011b: 3-7)

The statement above suggests that both dominance and extroversion are important. In fact Stogdill pointed out that in previous research the great military leaders had been highly introverted (Stogdill, 1948). The relationship between dominance and leadership was also unclear. (*Ibid.*). This suggests that some of the assumptions made in the study of military leadership and by military organisations may need review.

This important work radically changed the direction of leadership research (Zaccaro, 2007). Stogdill argued against a set of measurable traits for leaders. He argued instead for specific and contextual personal characteristics (Bass and Bass, 2008: 94). What is more, these characteristics, had to conform as a pattern to match those of the followers (*Ibid.*). Although the relationship of leaders and followers (based on their personal characteristics) is stable, the group's situation is highly changeable. This situational aspect, Stogdill argued, makes the selection, development and study of leaders for certain tasks very difficult (Stogdill, 1948) (*op. cit.*). A decade later another review of trait theories echoed the same sentiment. Mann's review in 1959 also found that the large variance in correlations between traits and performance cast doubt over the utility of those particular traits (Mann, 1959). Although some authors have suggested both reviews were misunderstood (e.g. (Antonakis et al., 2012; Lord et al., 1986)), most leadership scholars accept that this seminal work was the beginning of the end for trait-based theories as research moved into situational leadership.

Situational and behavioural approaches to leadership also started to dominate leadership studies around this time and contributed to the decline of trait based approaches (Xu et al., 2014). McClelland's seminal work stressed the utility of competence approaches as a possible solution to the inherent methodological issues (and misuse) of IQ tests (McClelland, 1973). Although not aimed at leadership studies, McClelland's important article cast a shadow over the use and predictive value of IQ, and traits in general. It also ushered in a new approach: competency frameworks. Despite Stogdill's later review in 1970 which, through the use of more modern techniques, reasserted that traits were important (Bass and Bass, 2008: 101) and Stogdill's statement that his earlier review had been interpreted too negatively (Lord et al., 1986), situational approaches to leadership were still dominant in the late seventies (Bass and Bass, 2008: 102).

In the Eighties researchers began to question the wisdom in rejecting trait theories so completely (Zaccaro, 2007). Stogdill's empirical assumptions were challenged. The rise of Transformational

Leadership approaches also suggested that the rejection of traits had been premature. Transformational Leadership partly revived trait theories because of its leader-centric approach (*Ibid.*). As leadership scholars returned to the subject of traits they concluded that the number of traits required consolidation and this was a weakness of earlier attempts to analyse traits scientifically (Zaccaro, 2007; Ng et al., 2008). The integration of separate traits and their dynamics was not considered in early trait studies (Zaccaro, 2007). These flaws were considered in numerous studies which revived interest in trait approaches to leadership resulting in a more scientific methodology and one which did not exclude situational factors.

An important study, linked by many researchers with the re-emergence of traits, is the meta-analytical study by Lord et al. (1986). The authors of this article critically review both Stodgill's 1948 and Mann's 1959 review of leadership traits. Meta-analytical techniques were, by then, available which were superior to the simple mean value attached to correlations from numerous studies by Mann, for example (Lord et al., 1986). The study concentrates on Mann's study applying the meta-analytical technique of validity generalisation. The review discovered empirical support for traits using the same data (*Ibid.*). This important work re-established traits as important variables for leadership studies.

There is another aspect of the Lord et al. (1986) study. The authors also make the point that both Stodgill's 1948 and Mann's 1959 reviews concern leadership emergence and perceptions and *not* leadership performance. Many leadership scholars of the last half of the twentieth century had conflated these important distinctions (*Ibid.*). A serious criticism of trait approaches is that they are inherently biased towards heroic notions of what leaders should be (i.e. idealised traits). That such traits are correlated with leadership *perceptions* is perhaps not surprising. Lord et al. (1986) are explicit about this factor in their conclusion stating "They[the results] do not directly imply that there are traits that would generally predict the performance of the leader's group or organisation..."(*op. cit.*:408). So although traits were redeemed by this work, constraints remained. One serious constraint remained the taxonomy of leadership traits, there were simply too many potential traits to create an useful model of leadership

A way to consolidate the burgeoning list of potential attributes was to confine studies to the list of five personality traits known as the "Big Five". This coincided with a similar debate in the wider discipline of psychology. Here, too, there had been considerable disagreement about the importance of personality versus situation in determining behaviour. Two scholars Eysenck and Cattell favoured consolidation of numerous traits into conglomerations using statistical Factor analysis (Gross, 2010: 666). Although the psychologists disagreed on the precise method and classification of the resulting factors, the method proved influential. Factor Analysis allows researchers to classify certain traits, such as extroversion, as source traits for other downstream traits, such as sociability. Ultimately a consensus emerged that five source traits were sufficient to describe personality: Neuroticism, Extroversion, Openness to experience, Agreeableness and Conscientiousness (*Ibid.*:672). The "Big Five" are subtly different to Eysenck and Cattell's original synthesis. They represent a refinement of the foundational research based on the increasing empirical support for the five factor model (and its proximity to the original research) (Cervone and Pervin, 2015: 39) (Van der Linden et al., 2012). Additionally, a sixth factor: honesty could now be added to the model (Cervone and Pervin, 2015: 245).

Some leadership scholars also looked to the “Big Five” (or OCEAN) to rationalise trait theories of leadership (e.g. Digman (1989); Judge et al. (2002); Cavazotte et al. (2012); Colbert et al. (2012)). Judge et al. (2002) found a strong correlation between the five factor model and leadership in their study, with extroversion as the greatest single correlation. All traits were positively correlated with the exception of neuroticism which was strongly negatively correlated to leadership (*Ibid.*). Ng et al. (2008) also found the same profile of correlation between the “Big Five” and leadership in the Singapore military. However another military study, of the Australian Armed Forces, found that senior officers were less likely to be extroverted (McCormack and Mellor, 2002). Nevertheless the study by Judge et al. (2002) remains a highly cited work and has been claimed as the “the best study yet published on the links between personality and leadership” (Hogan and Kaiser, 2005).

Studies by Hogan and colleagues (Hogan et al., 1994; Hogan and Kaiser, 2005) reinforced the growing body of evidence for traits. In both works the authors address the problem with studying leadership perceptions or leadership performance by asking the question “who should lead?” rather than “who shall lead?” (*Ibid.*). In this way they find in favour of team performance as a measure of leadership (Hogan and Kaiser, 2005). Hogan and Kaiser (2005) is a particularly useful study linking the development of single personality traits to the one of the first process models, mapping traits to leadership outcomes. The article articulates the need for leadership as resolving group coordination issues, this being a primal need for humans (*op. cit.*). Another factor which makes good leadership so important is that bad leadership has led to so much human suffering over history (*Ibid.*). Therefore leadership is important for teams to be successful and is an activity which builds and coordinates teams. Finally both studies demonstrate that personality traits are important antecedents of leadership (Hogan et al., 1994; Hogan and Kaiser, 2005).

Hogan and Kaiser (2005) use a cross-disciplinary approach, defining leadership as a group coordination adaption. As such it is one of the first works to depart from the traditional traits approach. Furthermore it describes the leadership function as a dichotomy between serving a group and achieving personal power; “getting along” and “getting ahead” (*op. cit.*). This approach is a departure from previous trait methods because it places leadership in a highly social context. This may be because, as the authors state, in 2005 leadership based on individual personality was still far from in-favour (*Ibid.*). As Hogan and Kaiser (2005) explain their approach has much in common with sociologists, evolutionary psychologists and anthropologists. Later evolutionary leadership theory (ELT) would adopt a very similar approach to leadership (e.g. Van Vugt and Ahuja (2010)).

In addition to finding the five factor model suitable for the study of leadership traits and stating that such traits are significant for leadership, Hogan and Kaiser (2005) also argue for a process model. They argue that traits define style which, in turn, defines team responses and therefore organisational performance. This, too, was a glimpse at a more recent development, the trait-process model (e.g. Antonakis et al. (2012)). Measuring personality traits, using the five factor, was initially difficult due to behavioural variability (Fleeson, 2001; Antonakis et al., 2012; Dinh and Lord, 2012). Fleeson (2001) found that variability in behaviour centred on dispositions which are stable and predictable, based on personality factors. This has been supported by personality research based on average behavioural dispositions as an indicator of underlying personality traits (Van der Linden et al., 2012) (Cervone and Pervin, 2015: 39). However, the argument concerning

the variability of behaviour and its confounding effects on traits research rages on (Cervone and Pervin, 2015: 39) (*op. cit.*). There is also growing research into the linkages between biology and personality traits which links trait research to its antecedents (i.e. genes) (*Ibid.* p.236).

Five factors is viewed by some scholars to be too narrow to define leadership (Antonakis et al., 2012; Zaccaro, 2007). Recently researchers have called for research that avoids long lists of vague traits but it is also not dogmatically based on too few. To move traits approaches from its current "lull"(Antonakis et al., 2012: 644) a taxonomy of individual differences relevant to leadership is required. Specifically the following criteria are required:

1. Traits must be measurable.
2. Traits must vary across individuals.
3. Traits must be stable.
4. Traits must predict behaviour.

In order to address these issues and to illuminate the path to a meaningful study of leadership differences, and their importance, some leadership scholars have recently made recommendations for future researchers (e.g. (Zaccaro, 2007; Antonakis et al., 2012; Dinh and Lord, 2012)). These scholars agree that a taxonomy of traits is required but it should not be limited to the five factor model since to do so could mean missing other important factors(Antonakis et al., 2012). Another imperative is to consider how these traits integrate instead of considering them isolation (Zaccaro, 2007; DeRue et al., 2011). There is also evidence that personality traits like the big five maybe related to cognitive traits such as intelligence (DeRue et al., 2011). As stated above these traits must be measurable for us to study them. Finally the dynamics of the resulting model should account for trait stability and moderating factors (e.g. situation, leader and follower behaviours)(Zaccaro, 2007).

From this more sophisticated appreciation emerges a process of distal and proximal antecedents, leadership dynamics and finally outcomes (Zaccaro, 2007). Distal factors include personality but also cognitive skills, values and beliefs. Proximal factors are knowledge, problem solving skills and people skills (*Ibid.*). The dynamics include leadership processes moderated by situational factors leading to outcomes such as leadership emergence, effectiveness and promotion (*Ibid.*). Team performance is not stated as an outcome in Zaccaro's model; perhaps this is implicit in leader effectiveness. This subtlety highlights the continuing difficulty not only with defining leadership but also leadership outcomes. For example Lord et al. (1986) state that leadership emergence is a better measurement of leadership than group performance. Leadership emergence refers to followers' acceptance of an individual's mandate to lead (Bass and Bass, 2008: 60-61). DeRue et al. (2011) include task performance or team performance as a leadership outcome, Hogan and Kaiser (2005) find in favour of group performance as the superior measurable outcome. A similar but more simple model is described by Antonakis et al. (2012). This model also incorporates distal and proximal factors, the former being traits and the latter leader and follower behaviours. These predictors generate multilevel outcomes and the whole process is bounded by time.

Multivariate techniques (not available at the time of Stogdill's 1948 review) allow researchers to assess the interaction of proximal and distal traits and are therefore key to the new trait-process



(Zaccaro, 2007; Antonakis et al., 2012). There are other ways of incorporating new approaches which benefit the reconstituted trait theories. For example Antonakis et al. (2012) suggest the inclusion of temporal leadership as recent research has demonstrated that time oriented leaders may perform better in strategic contexts. Pro-activity and moral leadership may also form part of process model of leadership (*Ibid.*) The previously mentioned problem with trait stability can also be tackled when researchers accept that traits vary around a central tendency. Once we know the central point of a state distribution of a trait and its variability it is possible to make predictions (Antonakis et al., 2012). Dinh and Lord (2012) look to events to explain the dynamics of traits, creating a narrative of the leadership process which avoids the pitfalls of mapping aggregate trait measurements to outcomes.

Trait process theories of leadership also incorporate situational analysis (Zaccaro, 2007) and inclusion of follower traits (Antonakis et al., 2012). However Antonakis et al. (2012) remain focussed on individual differences expressed genetically in leaders also. In understanding how trait processes may work some accommodation must be made not only for situation but also leader behaviour, another proximal predictor (Antonakis et al., 2012). DeRue et al. (2011) point out that, in fact, leader behaviours explain more variance in outcomes than traits. From traits to behaviours and situations and finally outcomes, a process has been sketched by recent trait process researchers. An important contribution was made by Dinh and Lord (2012) who suggested the use of events to analyse the leadership process in action.

Since traits vary continuously, it is assumed around a central mean, events can be used to observe the conditions under which certain traits vary. In other words the interaction between leader traits, behaviours, situation and follower traits is directly observed *Ibid.* Episodic events can be used quantitatively and qualitatively to understand the dynamics of trait processes and advance the trait process paradigm (Zaccaro, 2007). Most of the trait process researchers have illustrated the proposed dynamics graphically (e.g. Zaccaro (2007); Antonakis et al. (2012); Dinh and Lord (2012)). Figure 2:1 (below) demonstrates the common features of recent approaches to show, generally, how trait processes are thought to operate.

## CLASSIC TRAIT LEADERSHIP MODEL



## TRAIT PROCESS MODEL

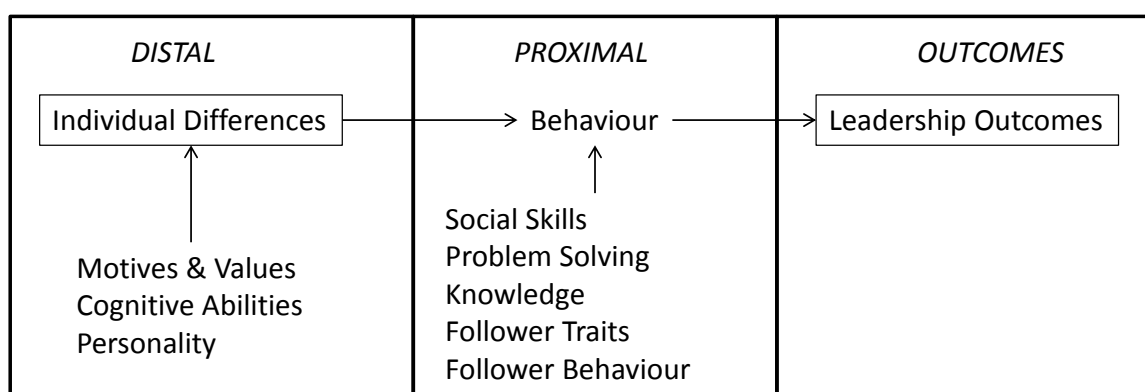


Figure 2.1: Classic trait and trait process models of leadership

In summary, despite the intuitive appeal of traits as an explanation of leadership, the paradigm has suffered many setbacks. Carlyle himself had many detractors including Herbert Spencer (Spector, 2015). In the mid twentieth century the approach was greatly diminished after Stogdill highlighted the lack of precision over trait definitions, taxonomy and the appeal of situational approaches (Stogdill, 1948). The situation in which leaders act also led to the preference for competencies after McClelland dismissed the use of IQ in favour of competencies in 1973. The resurgence of the trait approach may have been due to the equally dogmatic approach to situation as the only explanation for leadership. Traits historically considered no other variables, similarly it was unlikely that situation could be the only answer. It was Lord et al. (1986) that highlighted how scholars had misunderstood both Stogdill and Mann's work (Stogdill, 1948; Mann, 1959). Their study revealed that traits needed to be organised scientifically using newly available techniques. Much headway has been made since then, especially using the Big Five personality traits (e.g. Hogan and Kaiser (2005)). However these approaches, although resolving taxonomic and methodological issues lack an empirical basis at this time. Trait process approaches promise to resolve this through the use of sophisticated dynamic models, especially the use of event based models (Dinh and Lord, 2012). Trait-process theories still form a part of the heroic narrative since individual differences are still

used to explain leadership. However by adopting a process based approach, contextual and dynamic factors have been applied. Although there has been very little use of these models so far as a research framework, some researchers feel that trait approaches are on the brink of a new resurgence (Zaccaro, 2012). Traits no longer consider just the leader but the leader's *interaction* with followers, the environment, situation and time.

### 2.2.1 Trait theories and military leadership

Leadership is thought to be a defining quality of military organisations. Wong et al. (2003) states that "...leadership and the military are practically inseparable". While Plato's Republic does not state the ideal leaders, the "guardians", are military men, they certainly have a martial character. Xenophon who, like Plato, was a student of Socrates, applied his master's leadership teaching to his military career (Adair, 2002: 6). Trait approaches to leadership, especially the Great Man tradition, cite the examples of great historic leaders and many of them are also martial figures (e.g. Adair (2002)). The attachment is mutual as the military invariably draws on traits for the selection and advancement of its leaders.

In Stogdill's seminal work (above) some of the findings were drawn from an earlier study of leadership traits by Jenkins with regard to its application to military selection procedures for officers (Jenkins, 1947). Jenkins discovered that "No single trait or group of characteristics has been isolated which sets off the leader from the members of his group." (Jenkins, 1947: 74-75). His study of the US, British and German armies after WWII revealed that selection of officers was based on "subjective" criteria loosely defined as a set of "officer qualities" (*Ibid.*). The parallel with Officer Like Qualities or OLQs used in the RN today, albeit informally, is striking and perhaps of concern. Jenkins concluded that leadership is, in fact, situational. He also challenged the notion that intelligence is related to leadership. He noticed that leaders appeared to be selected on the basis of similar socio-cultural characteristics rather than any empirical criteria (Jenkins, 1947). Trait theories appear to be subject to the same problems in military studies as elsewhere.

While trait theories of leadership diminished in the last half of the 20th century in academia, the military community never lost their faith in the approach (Wong et al., 2003). The OLQs mentioned are no longer formally included in appraisal reports in the RN, but they still form a part of the vernacular. A modern RN appraisal report includes scores in the following areas:

1. Leadership
2. Effective intelligence
3. Judgement
4. Management
5. Initiative
6. Reliability
7. Powers of communication

8. Subordinate development

9. Courage and values

The list above, which is also used in the British Army and Royal Air Force, might be described as list of traits or, perhaps, competencies. Although leadership is the first item, the rest of the list are also considered as leadership qualities. Military leadership has not only heavily influenced the development of trait and Great Man theories (i.e. heroic leadership), it is also heavily influenced by those theories.

Resolution of the problems attending trait approaches has often come from studies of military leadership. For example, McCormack and Mellor (2002) state that the problems discovered by Stogdill and others lay with the problem of classifying all of the proposed traits into a simple taxonomy, such as the military often use. Like other leadership traits researchers, the authors proposed that the answer lay in using the Five Factor Model of psychological traits (*Ibid.*). This approach has also been used in a military context by Ng et al. (2008). As with Jenkins (1947) the results are contradictory, especially with respect to extroversion. McCormack and Mellor (2002) are clear that extroversion is negatively correlated with senior leadership while openness and conscientiousness are positively correlated in their study of the Australian military. Ng et al. (2008) however, find positive correlations for all of the "Big Five" personality factors in the Singapore Ministry of Defence. The contradiction over extroversion is mirrored in Stogdill (1948) where historic military leaders are apparently "very high in introversion" (Bass and Bass, 2008: 86). This is worrying for military leadership studies especially as extroversion is widely believed to be an important trait for selecting military leaders (*Ibid.*: 181).

## 2.3 Competencies

### 2.3.1 The competency approach

As stated earlier David McClelland's seminal article (McClelland, 1973) dismissed for good the notion that a single trait (in this case IQ) could be used to make predictions about the effectiveness of individuals in complex workplace situations. McClelland pointed out, rather dryly, that "intelligence is what intelligence tests measure." (*Ibid.* :2). The fact that later Lord et al. (1986) reaffirmed the link between intelligence and leadership in no way diminished McClelland's impact. This is because McClelland did not dispute the significance of IQ but he comprehensively exposed the ubiquitous abuse of IQ as an explanation of success, not to mention the use of IQ to reinforce the social wrongs of the time. Single traits could not be used to select individuals for jobs but competencies could be used. Competencies refer to personal characteristics but, unlike traits, can consist of a wide range of qualities from knowledge and skills to behaviours (Gill, 2011: 325). Instead of dogmatically relying on a handful of generic traits to explain leadership outcomes, competency models can be constructed from elemental characteristics which suit a particular context (*Ibid.*). These models or frameworks are appealing for this reason and also fitted the situational approaches that were popular at this time. Methods of measuring competencies were developed including behavioural event interviews and assessment centre techniques (Boyatzis, 2008). With the ability to adapt competency models to specific roles and well established methods of measurement it is little wonder that the approach

gained popularity, especially in management practice.

When a colleague of David McClelland, Richard Boyatzis, reviewed competencies in 2008, he noted that virtually all companies with more than 300 employees (presumably in the USA) used some form of competency model for recruitment (Boyatzis, 2008). Fundamentally the approach relies on matching individual talent to a specific role. Talent is based on experience and expertise, knowledge and certain cognitive skills (*Ibid.*). These are threshold competencies but a further three clusters of competencies define “outstanding” performers: cognitive competencies, emotional intelligence and social intelligence (*Ibid.*). While Boyatzis includes a biological facet to the operation of competencies (e.g. hormonal and endocrinal function), he insists that competencies can be developed (*Ibid.*). The competency approach suggests that leaders can be made.

The role of situation in competence frameworks suggests a break with the heroic paradigm of generalisable leadership traits. However competences are thought by some to reinforce heroic notions because they focus on individual differences (Gill, 2011: 325). Boyatzis’ review of competencies in the 21st Century (Boyatzis, 2008) uses certain competencies to differentiate “outstanding” from merely “average” performers. Williams (2008) describes competent leaders as “outstanding” or “superstars”. Furthermore she maintains that the ratio of outstanding to typical leaders is 12:8 and that this is normal for competency approaches (Williams, 2008). Compare this with Hogan and Kaiser’s estimation for the “base rate for managerial incompetence” of 50 percent (Hogan and Kaiser, 2005) and the competency approach does seem to take a heroic view of leaders.

Competency approaches do not exclude personality traits but place them within a broader framework including other skills, experience and behaviours (Dulewicz and Higgs, 2000). The same researchers have constructed a competency process which also incorporates leadership styles (Dulewicz and Higgs, 2005). There is, therefore, a great deal of overlap between the competency approach stated by Dulewicz and Higgs (2005) and trait process approaches. Dulewicz and Higgs (2005) propose a model which includes personality driving leader behaviours and styles, interaction with followers and situation to derive outcomes.

In summary competency frameworks offer an alternative to traits in that they do not rely on the disparate and discredited list of traits of the 20th Century. Furthermore they can be adapted to fit specific roles or simply rely on a handful of well defined universal competencies. For these reasons the competency approach became very popular. However, they are fundamentally heroic in nature since they assume that leaders with a certain skill set will achieve superior results with little account of follower effects. Although, in theory, a competence framework can represent the situational aspects of a specific role, the simplification will diminish the validity of the framework. An allied criticism attacks the supposed universal effectiveness of the simplified traits to all situations and levels. However competence frameworks which incorporate a dynamic view of leader differences in action (e.g. Dulewicz and Higgs (2005)) are more likely to be grounded in the situation.

Leadership scholars who advocate the use of competences (e.g. Boyatzis (2008); Bass and Bass (2008)) have found in favour of universal competences which resolve both the universality and reductionist criticisms. Another criticism is that competences reflect only the past or present rather than what will or may be required in the future. This is not the case, however, for they can be identified

for the future, for example through scenario planning (Gill, 2011: 326). Some have claimed that competence approaches omit the difficult aspects of behaviour such as motives, values and social constraints because they are difficult to measure (*Ibid.*). Despite this the competence approach remains popular especially in managerial practice (Boyatzis, 2008). Given the skepticism surrounding traits, competencies offer a similar alternative which can be tailored for specific roles.

### 2.3.2 Competency in the RN

The RN has recently adopted the competency approach to leadership. RN Defence Fellow, Captain Mike Young and Professor Victor Dulewicz conducted the first and only research using competency frameworks in the RN from 2003 onwards (Young and Dulewicz, 2005, 2007, 2008, 2009). Their investigation into command leadership and management (CLM) in the RN became the framework for all CLM development in the service. The construct was also amended slightly and used for the selection of officers for Sea Command.

In common with other competency approaches Young and Dulewicz began with the assumption that a small number of capabilities could be linked with superior leadership performance (Young and Dulewicz, 2005). However, the authors point out that there is a difference between competency and competence. A competency only suggests potential for leadership performance. When a leader performs well he or she displays competence (*Ibid.*). In concert with recent applications of trait theories, Young and Dulewicz suggest that there is a process for competencies too. Competencies rather than traits alone are the distal predictors whilst competence suggests leadership behaviours which are regarded as proximal by trait theorists (e.g. Antonakis et al. (2012)). Competencies and competence drive leadership outcomes or performance. This arguably leaves no room for situational factors or follower effects. However, Young and Dulewicz, as other scholars have argued, still believe that the skill set owned by leaders has a great enough effect to warrant the use of the approach (Young and Dulewicz, 2005). An advantage of the competence approach may also be that the framework is designed around certain situational constraints, even if some feel this is likely to be an over-simplification.

Situational parameters within the RN are conceived as largely cultural resulting in a competency profile which supports an organisation of task oriented individuals, a notion known in the RN as “Getting Things Done” (St George, 2012; Young and Dulewicz, 2005). Additionally the framework must encompass command, leadership and management. The definition of command, leadership and management, as disparate or allied aspects of leadership, has caused plenty of academic debate (e.g. (Grint, 2014; Young and Dulewicz, 2008)). Conversely in the RN these three areas are clearly defined:

**Command:** this is the position of authority and responsibility to which military staff are legally appointed. Leadership and management are the key components in the successful exercise of command.

**Leadership:** this is visionary; it is the projection of personality and character to inspire people to achieve a desired outcome. There is no prescription for leadership and

prescribed style of leader, though it can be recognised through a set of behaviours. leadership is a combination of example, persuasion and compulsion and is dependent on the situation.

**Management:** this primarily concerns the allocation and control of resources (human, material and financial) to achieve objectives.

Source: (St George, 2012: 64)

From a practitioner perspective the RN has no difficulty with the definition of command, leadership and management or attributing these to a set of characteristics (e.g “Officer Like Qualities”). Young and Dulewicz (2005) established a definite set of competencies clustered around 4 supra-competencies to explain superior performance in these three fields. It is worth noting that the definition of leadership above uses very heroic language in contrast to the very functional descriptions of command and management. The definition is also archaic and inadequate. The authors state that in all three areas a leader must conceptualise the requirement, align resources, participate and succeed, this process became the basis of their competency framework(Young and Dulewicz, 2005).

Research by Young and Dulewicz (Young and Dulewicz, 2005, 2008) does not rule out the inclusion of traits. In fact the researchers include traits as competencies wherever those traits predict superior performance (Young and Dulewicz, 2008: 17). A competency, therefore, is any characteristic (usually an underlying quality such as a personality trait) which predicts above average leadership behaviour (*Ibid.*).

To avoid common problems with defining competencies, Young and Dulewicz (2005) set out to define leader characteristics by using strictly measurable behaviours. Their method combined personality and competency measures by using two instruments: the Occupational Personality Questionnaire (OPQ) and the Leadership Dimensions Questionnaire(LDQ). The surveys were undertaken by 280 sailors (called ratings) and officers of the RN in 2003. The survey could not be conducted on warships as operations were ongoing following the invasion of Iraq that year. The Maritime Warfare School (MWS) was therefore chosen, a location where front-line personnel attended leadership and professional courses. This choice ensured a representative sample of the sea-going Navy. A 97 percent response was obtained for the questionnaires. The resulting profiles were analysed using leadership assessments in appraisal reports as the dependent variable (*Ibid.*). Significant correlation was found between the LDQ and OPQ dimensions and performance. The dimensions of the two instruments were assessed as clustering around groups, or clusters of competencies, named supra-competencies. These clusters supported the hypothesised leadership process and are listed below:

1. Conceptualise
2. Align
3. Interact

#### 4. Create Success

(Young and Dulewicz, 2005)

The competencies are defined as follows:

**Conceptualise:** Get and share the picture of what needs to be achieved by developing perspective, exercising critical analysis and judgement, being innovative where required, effective planning and the ability to transform these cerebral activities into a vision that provides unambiguous focus for team members.

**Align:** Focus controllable assets by taking responsibility for converting plans into action; providing an example by being reliable, organised and conscientious; in so doing get people moving in the right direction through appropriate use of control, empowerment, delegation and subordinate development.

**Interact:** Work with and through other people sensitive to the contrasting needs for influence and freedom of action; using effective decision making, interpersonal sensitivity and communication to energise team performance.

**Create Success:** Make a habit of delivering results through professional effectiveness, personal determination, commitment to teamwork and the effective and efficient use of the available organisational infrastructure and skills of its people.

(Young and Dulewicz, 2005)

The interplay of each supra-competency is broken down and explained according to its role in the command, leadership or management modes (see Young and Dulewicz (2005)). The competencies supporting interaction were the most highly correlated with overall performance (Young and Dulewicz, 2009). Table 2.1 summarizes the relationship between the RN competencies framework and command, leadership and management.

In 2007 the Commander-In-Chief of the RN (now called the Fleet Commander) ordered a review of the Sea Appointment Selection Board (SASB) criteria for selecting Commanding Officers of RN warships. This selection board is of critical importance to naval officers' careers. The opportunity to command one of Her Majesty's Ships is *the* defining moment of a warfare officer's career. Sea Command is crucial to RN identity and therefore officers' career trajectories. The review sought to identify "Critical Success Factors for Ship Command" (Tate, 2009). It began with a summary of the work published by Young and Dulewicz (2005). This was developed for the specific context of Sea Command by interviewing senior officers on the subject. This resulting analysis created a fifth competency cluster: Warfare Skills (*op. cit.* Tate (2009); Navy (2011a)). The Command Competency Framework (CCF) competency clusters are broken down into more detail in Figure 2.2.



Competency	Command	Leadership	Management
Thinking	Clarifying superior intent	Setting the direction	Planning and budgeting
Matching up	Ensuring subordinates' ability to meet remit	Aligning people to the task	Organising and staffing
Interact	Timely decision making	Motivating and inspiring	Coordination and problem solving
Create Success	Success through determination	Mastery of the context	Control of the environment

Table 2.1: Matching competencies and activities in the RN. Source:(St George, 2012: 65)(Thinking and Matching up are Conceptualise and Align respectively)

## Command Competence Framework

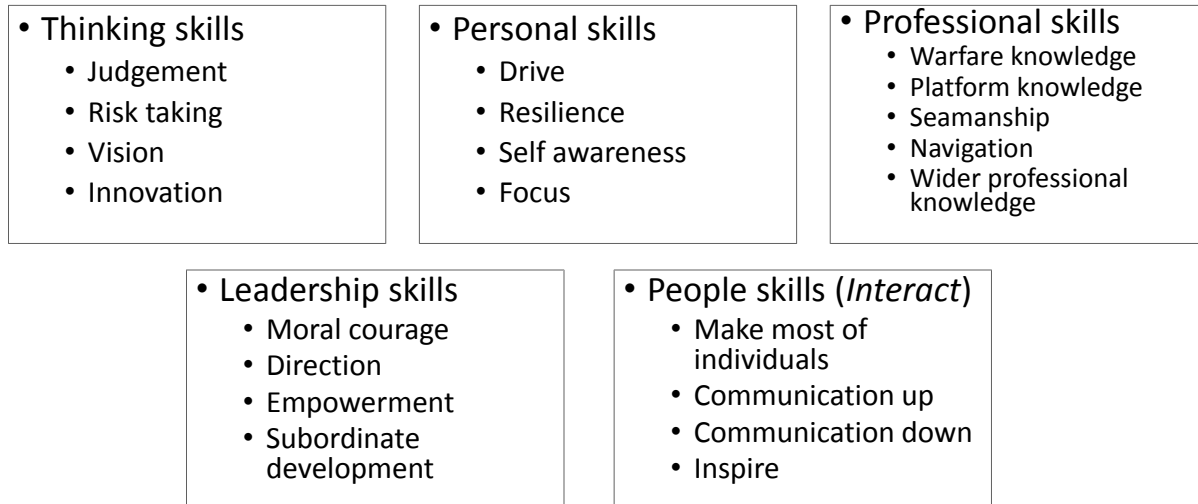


Figure 2.2: The Command Competence Framework (CCF).  
*Competencies translated from Young and Dulewicz (2005) as Thinking Skills = Conceptualise, Personal Skills = Create Success, Leadership Skills = Align, People Skills = Interact*

Source:(Navy, 2011a).

## 2.4 Leadership styles

Like traits, styles of leadership have always been a part of the leadership debate. For centuries philosophers have debated the question: should people be governed or guided?(Bass and Bass, 2008: 439). Mostly the debate has been confined to a discussion between autocratic and democratic

styles (*Ibid.*). Modes of interaction are also styles of leadership. Leadership style theories emerged in the 1950s and 1960s following dissatisfaction with the trait-based theories (Gill, 2011: 71). Seminal studies established styles which were viewed as task or people oriented (the Michigan studies) or as *structuring* or *consideration* (the Ohio State studies) (*Ibid.*:71).

The consequence of the Ohio State Studies was the classification of leadership styles into task or team based behaviours, an enduring way to talk about leadership. This implies that a leader has a preferred style although some scholars advocated leaders who were able to enact both task and people oriented style (Gill, 2011: 72). A more sophisticated model is the well known Leadership Grid originally developed by Blake and Mouton as the Managerial Grid in 1964 (*Ibid.*:73). The Leadership Grid still uses the two dimensions: task and people orientation. The resulting grid can place a leader anywhere in a matrix which combines high, low or medium dispositions towards tasks and people. A development of this grid was a descriptive scheme with five leadership styles: directive, consultative, participative, negotiative and delegative (Gill, 2011: 73), (Bass and Bass, 2008: 511).

Styles approaches have lessened in importance in academic research although their practical applications make them useful in leadership development. For example, Action Centred leadership (ACL) remains at the core of leadership training in the RN and is based broadly on task/people approaches to team leadership (Gill, 2011: 74). Leadership styles have lost traction within academia because they fail to account for situational aspects of leadership, do not include the role of values and have failed to sufficiently establish a link between different styles and team performance. However, it is clear that followers prefer people oriented styles of leadership (*Ibid.* :72). Khan's engagement theory (Kahn, 1990), for example, claims that concern for people (in interactions) is an antecedent for engagement and team performance.

Although the styles approach is less popular in the latest academic research, recent important work has integrated the subject with contemporary approaches. Dulewicz and Higgs (2005) combine the findings of the "Transformational School" and situational leadership to discuss styles in a context of change. This results in three style categories:

1. Goal-oriented
2. Involving
3. Engaging

(*Ibid.* )

As well as developing a new survey instrument, the Leadership Dimensions Questionnaire (LDQ), the authors integrate the consequences of transformational and situational research (both of which are covered later in this review) with the styles approach. This work updates the styles approach and makes it relevant to modern leadership studies.

## 2.5 Situational Leadership

Many leadership scholars ascribe the popularity of the situational approach to leadership to the findings of Ralph Stogdill's review of leadership traits (e.g. Antonakis et al. (2012)). Both this review and Mann's review of leadership traits (Mann, 1959) appeared to emphasise situational factors over traits (although the findings may have been misrepresented: see (Lord et al., 1986)). However, there is little contention that situational leadership dominated research after the demise of the traits approach. Situational approaches advocate that both directive and supportive styles of leadership can be used by effective leaders and each is stressed according to the context (Northhouse, 2004: 87). The approach was developed by Hersey and Blanchard (Hersey and Blanchard, 1969; Northhouse, 2004).

Situational approaches build on the styles approach using the terms directive and supportive, which appear to be similar to task and people oriented styles. But situational leadership scholars did not simply catalogue the styles, they advocated the appropriate use of styles depending on the situation. Although situational leadership theories were still leader-centric and still fit within the heroic paradigm, there is at least an acknowledgment that followers matter. Leaders are expected to match their style with followers' needs (Northhouse, 2004: 88). The best known application of situational theory is Hersey and Blanchard's later model, the Situational leadership Model II (SLII) (Hersey and Blanchard, 1969; Gill, 2011; Northhouse, 2004). Rather like the Leadership Grid, SLII presents a few strictly defined leadership styles. But these styles are named delegating, supporting, coaching and directing (Hersey and Blanchard, 1969; Gill, 2011; Northhouse, 2004).

Included under situational approaches is Fiedler's Contingency Theory (Fiedler et al., 1964), (Gill, 2011: 79). Whereas other situational approaches considered the two styles discussed earlier, Fiedler's theory considered the context in greater detail. He isolated three features concerning situations which would predict the best leadership style: task structure, authority power and leader-follower relationships (*Ibid.*).

Like trait theories, situational theories have a great deal of intuitive appeal. However, situational theories suffered from similar methodological problems to trait theories. A mere two leadership styles failed to take account of all situational factors but a larger list could not be correlated with positive outcomes (Bass and Bass, 2008: 571). In fact it was impossible to statistically isolate even a small number of styles given the vast number of confounding situational variables (*Ibid.*:572). Ultimately the situational approach failed to develop beyond the theories described and therefore have declined in importance (Gill, 2011: 81).

## 2.6 Path-goal theory

This review of leadership theory describes the development of leadership Studies from the "Great Man" approach featuring an ever increasing consideration of followers and situations. All of theories described so far are heroic in the sense that they are still leader-centric. The strategies and styles explained are those adopted by leaders and the analysis of follower behaviour is limited. However, both style and situational theories at least acknowledge the consequences of having followers. Style considerations have speculated about two styles and their effects on followers. Situational approaches

take this further to consider several styles and their appropriateness to follower-development. Contingency approaches have focussed more on situational variables but less on followers. Path-goal theory stresses the link between leader style and both follower characteristics and situation (*Ibid.*). The central characteristic of path-goal theory is its consideration of the leader as clearing a path to achieve certain goals. The leader must consider situational factors, follower characteristics and adopt the correct style (which are defined in a similar fashion to the earlier situational approaches) (Gill, 2011; Bass and Bass, 2008; Northhouse, 2004). The motivation for followers is essentially transactional (Gill, 2011: 79) since financial or psychological rewards are defined as the reason for employee effort.

While path-goal theory develops and integrates style, situational and contingency theories it has suffered from the same methodological weaknesses as these theories. Like contingency approaches the number of possible situational configurations quickly becomes unmanageable (Northhouse, 2004: 132). Turbulent situations experienced in many areas of leadership would make the definition of goals impractical (Gill, 2011: 78). Like other heroic approaches these theories have emphasised leader behaviours and described followers with very little advocacy of their own (Northhouse, 2004: 133). Perhaps the most damning factor is, like the theories described earlier, the lack of empirical support for path-goal theory (Gill, 2011; Bass and Bass, 2008; Northhouse, 2004).

## 2.7 Leader-Member Exchange (LMX) theory

Leader-Member Exchange theory (LMX) emerged in the mid 1970s (Northhouse, 2004: 147). It differs from the situational and contingency approaches in analysing *interactions* as opposed to follower or other situational qualities (*Ibid.*). For my research LMX is especially important given the emphasis on leadership-interaction already described. LMX theory specifically describes the *dyadic relationship* between leaders and followers (*Ibid.*). Later in this chapter I will describe anthropological approaches to leadership and describe theories of interaction and leader-emergence which also take place at the dyadic level. LMX is therefore the most promising leadership theory described so far for a study of leadership-interaction.

Because the relationship under study is the single relational tie between leader and follower, the theory is also known as vertical dyad linkage theory (Gill, 2011: 77). LMX was born from a frustration with earlier trait and situational approaches which had failed to make headway (Dansereau et al., 1975: 47). A major cause of this frustration was that earlier approaches had treated followers as a “homogeneous” group (*Ibid.*). Dansereau et al. (1975); Graen and Cashman (1975) were the first to describe this radically new approach to leadership (Northhouse, 2004: 148). They found that dyadic relationships were sufficiently different to explain the variance in results for single leaders. For instance, Dansereau et al. (1975) discovered that in-groups where leaders allowed more latitude benefited from a better work environment than for out-groups of the same leader. Because previous theories assume that the leader behaviours are the same for both groups they failed to explain the situation as effectively as LMX theory.

Twenty years later the LMX school had developed beyond simple Vertical Dyadic Linkages (VDL). LMX had developed from a consideration of VDL to a multi-level study of leaders, followers

and their relationships with a focus on organisational outcomes (see Graen and Uhl-Bien (1995) for full review). By this stage LMX researchers were considering the whole network of dyadic relationships to describe the leadership dynamics of complete organisations (*Ibid.*). A meta-analysis was conducted in 2012 by Dulebohn et al. (2012) which serves as a comprehensive review of the considerable amount of LMX literature generated over 40 years. The review identifies a number of leader and follower antecedents, moderating factors and outcomes of LMX relationships. The review finds that leaders are most influential in LMX relationships and that these relationships are important for organisational outcomes.

Unlike the approaches discussed so far, LMX has continued to develop. As it has done so, LMX has been integrated with other leadership theories. For example, Li and Liao (2014) combine LMX with engagement theory (Kahn, 1990). LMX has also been considered in conjunction with implicit leadership theories (ILT) (Engle and Lord, 1997), resistance to change (Van Dam et al., 2008), mentoring (Scandura and Schriesheim, 1994) and psychological contracts (Wayne et al., 2010). Culture as a moderator of LMX has been studied by Erdogan et al. (2006); Erdogan and Bauer (2010) and Rockstuhl et al. (2012). Rather than continue to develop cross-sectional methodologies, LMX has also refined longitudinal techniques which describe the development of LMX relationships (Liden et al., 1993) and LMX processes (Zhang et al., 2012; Schyns et al., 2012). In doing so, the latter approaches have re-integrated some of the earlier traits research, for example the “Big Five” personality factors (Schyns et al., 2012) *op. cit.* LMX researchers have considered the superiority of horizontal dyadic linkages (*team member exchange (TMX)*) and vertical dyads (LMX). While the vast majority of research has been on the affect of leaders on followers Wilson et al. (2010) have also considered the affect of high LMX relationships on leaders.

LMX has been developed into Social Network Analysis (SNA) (e.g. Sparrowe and Liden (1997, 2005); Venkataramani and Green (2010)). Researchers have moved from dyads to consider the complete social network and discovered that well connected leaders and high LMX relationships converge to create greater influence (*Ibid.*). The SNA research just described and other examples, such as (Li and Liao, 2014), use multi-level approaches and also consider leadership processes making them very contemporary in leadership studies.

However, the diversity of LMX studies has also attracted criticism for its lack of coherence (Schriesheim et al., 1999). The approach lacks a refined set of concepts, theories and research objectives (Northhouse, 2004: 156). Another criticism is the emphasis on the inequality of LMX relationships which underlines the discrimination at the heart of society (*Ibid.*). Although the argument that LMX may glorify unequal leadership may be true, the criticism is a weak one when one considers that the aim of research is to discover the truth about leadership which, in practical terms, may be unequal. Notwithstanding that LMX requires further theoretic development and rationalisation, it has survived as a useful paradigm for leadership researchers to date and has demonstrated a sound empirical links to leader outcomes. Since the situational approaches failed to achieve this level of reliability it is a significant achievement in leadership studies. LMX, especially combined with SNA (Sparrowe and Liden (1997, 2005); Venkataramani and Green (2010)) is of particular interest to a study about interaction. The link between leader centrality (or prestige) will be explored in greater detail in Project 2 (Chapter 5) and its link with influence (Sparrowe and Liden (2005)) will be the subject of Project 3 (Chapter 6).

## 2.8 The “New Leadership” School

“New leadership” comprises vision, charisma and Transformational Leadership. I will cover these briefly in the next sections.

### 2.8.1 Transformational Leadership

Transformational Leadership was first defined as “transforming leadership” by James MacGregor Burns in his seminal book on leadership (Burns, 1978). In this book Burns contrasted Transformational Leadership with transactional leadership. The former, he stated, was capable of elevating leaders and followers to higher order purposes, whereas the latter implied some form of exchange. The exchange might be a financial reward, praise or withholding punishment (*Ibid.*). As well as increasing motivation, Transformational Leadership is reckoned to have a moral dimension (Gill, 2011: 82). Indeed Burns describes Transformational Leadership in intellectual terms, describing transformational leaders as intellectuals (Burns, 1978: 141). An intellectual is contrasted with moralists who enact social norms and theorists who analyse. An intellectual combines these roles and bridges the gap, establishing authentic moral guidance, without the dogma of the moralist or the detachment of the theorist (*Ibid.*). While Burns may not have been the first to coin the phrase, there is little doubt his description of Transformational and Transactional Leadership revolutionised leadership studies, Transformational Leadership is probably the most influential approach in leadership Studies today (Gill, 2011: 82)

However, compelling as it is, Burns’ description of transformational and transactional leadership is qualitative and lacks detail. This was provided by the Full Range Leadership model initially developed by Bernard Bass (Bass, 1985) and later, with Bruce Avolio (Bass and Avolio, 1990). The model incorporates extensive research into Burns’ ideas and creates an empirically supported structure of use to leadership scholars (*Ibid.* Gill (2011)). The Full Range Model is described below:

1. **Laissez-Faire Leadership** Laissez-faire leaders avoid taking a stand, ignore problems, do not follow up and refrain from intervening. In terms of leadership style theory, they use no particular style to a significant extent.
2. **Transactional Leadership** Transactional leaders practice management-by-exception and contingent reward.

*Management-by-exception.* Management-by-exception is practiced in two forms: passive and active. Passive management-by-exception is displayed when a leader sets work objectives and performance standards but then waits for problems to arise, reacts to mistakes and intervenes reluctantly. The active form entails monitoring for deviations and errors and then correcting them, and enforcing rules and procedures.

*Contingent Reward.* Contingent reward entails setting work objectives and performance standards, providing feedback, and also providing financial or psychological rewards for performance that meets expectations. This may result in motivating people to achieve goals and to develop themselves, but not to the extent of transformational leadership.

3. **Transformational Leadership.** Transformational leaders do more than 'transact' with subordinates or followers and this is what makes a significant difference to people's motivation and development. They stimulate followers to transcend their own immediate self-interest for the greater good of the group, organisation or society. Transformational leadership makes a positive impact on empowerment, motivation and morality. Transformational leaders tend to use one of the four 'I's listed below:

*Individualised Consideration.* Leaders actively listen; they identify individuals' personal concerns, needs and abilities; they provide matching challenges and opportunities to learn in a supportive environment; they delegate to them as a means of developing them; they give developmental feedback and they coach them.

*Intellectual Stimulation.* Transformational leaders use intellectual stimulation by challenging the status quo. They present new ideas to followers and encourage them to think. They encourage imagination and creativity in rethinking assumptions and old ways of doing things. They do not publicly criticise errors, mistakes, failure or ideas or approaches that differ from their own.

*Inspirational Motivation.* Leaders communicate a clear vision of the possible future; they align organisational goals and personal goals so that people can achieve their personal goals by achieving organisational goals; and they treat threats and problems as opportunities to learn. They provide meaning and challenge to the work of their followers.

*Idealised Influence.* Closely related to charisma, leaders show idealised influence when express confidence in the vision; they take personal responsibility for their actions; they display a sense of purpose, determination and persistence and trust in other people; and they emphasise accomplishments rather than failures.

Source: Gill (2011: 82-83).

The Full Range Model has allowed researchers to empirically observe Transformational Leadership in a number of contexts. The scope of research is vast and is outlined in Bass (1998) but also Bass and Bass (2008). The Multi-Factor Leadership Questionnaire (MLQ) was devised to measure each of the components of the model (Bass, 1998). The MLQ is one of the most used instruments in leadership research (Edwards et al., 2012) but its use in a wide variety of contexts may have been naive. For example, the UK manufacturing sector appears to have a subtly different profile of MLQ components to the universally accepted configuration (*Ibid.*). The MLQ consists of nine factors (five transformational, three transactional and one laissez-faire) (*Ibid.*). This is identical to the factors

already described except that *Idealised Influence* incorporates two factors (one of attribution and another of behaviour). However, as the authors point out, most researchers have focussed on a single transformational factor. For example Eisenbeiß et al. (2008) favour a measurement of a single Transformational Leadership factor in their research of innovation. A more contextual application of Transformational Leadership research instruments may have been missed up to now. For example, the UK manufacturing sector generates different responses to the MLQ than surveys conducted in the US (Edwards et al., 2012)).

Despite this Transformational Leadership has been correlated with a wide variety of leadership and social outcomes such as: ethical and pro-social group behaviour (Zhu et al., 2011; Zhu and Akhtar, 2014), innovation (Eisenbeiß et al., 2008), emotional leadership (Bono et al., 2007), and virtual team leadership (Purvanova and Bono, 2009). As well as outcomes, antecedents of Transformational Leadership have been researched from both a psychological and social psychology perspective. The role of the “Big Five” personality traits have been comprehensively researched by Bono et al. (2012); Felfe and Schyns (2010); Schyns and Sanders (2007); Felfe and Schyns (2006). These studies have focussed on followers’ traits finding that extroverted followers perceived more Transformational Leadership (Felfe and Schyns, 2006, 2010) and that the perception of Transformational Leadership was based on a similar personalities among followers (Bono et al., 2012; Felfe and Schyns, 2010; Schyns and Sanders, 2007). These particular studies are important because they consider the role of followers in determining Transformational Leadership. They differ from the majority of transformational approaches in this sense. They describe a sub-consciously negotiated leadership dynamic which, like LMX theories, is nuanced enough to reflect realistic leadership scenarios.

The quality of relationships between leaders and followers is also the subject of LMX research. Epitropaki and Martin (2013) have combined LMX and transformational theory to determine, again, a negotiated leadership dynamic which is based of follower perception. The determinant in this case is not personality but the quality of leadership interactions. Epitropaki and Martin (2013) observed that the quality of the relationships and the perception of Transformational or Transactional Leadership dictated the influence tactics adopted by followers. Increasing the level of analysis from dyads to whole networks allows a broader interpretation of transformational dynamics within a group. Bono and Anderson (2005) established a positive correlation with the centrality of leaders in a social network and their level of Transformational Leadership (note that, again, a single transformational factor is used).

A more complex dynamic was illustrated by Zhang and Peterson (2011) who demonstrated that social network parameters (specifically team density and centrality) mediate Transformational Leadership such that high density (and uniform high core self-evaluations (CSE)) lead to high performance where Transformational Leadership is an antecedent (*Ibid.*). The authors combine four of the MLQ transformational factors into a single transformational measure as we have seen in much of the transformational research. Additionally they found that high centrality works against the positive effect of Transformational Leadership (*Ibid.*). High centrality in a network suggests that a network features clusters of interaction around a one or a few individuals, these individuals have high centrality (Wasserman and Faust, 1994: 170). The earlier study by Bono and Anderson (2005) suggested that high leader centrality was actually beneficial although the assertion made by Zhang



and Peterson (2011) made it clear that team density will create a number of high functioning relationships. Presumably the context makes a difference here: situations in which leaders' decisions are vital favour highly centralised leaders but other situations may favour a team with wide-spread but uniform ties.

Social Network Analysis (SNA) naturally favours multiple levels of analysis (Wasserman and Faust, 1994: 25) but Transformational Leadership has been criticised on this issue. Dionne et al. (2012) demonstrated that journal articles which featured multiple levels of analysis tended to be published in higher impact journals. An example is Hoffman et al. (2011) who used multi-level structural equation methods to determine that Transformational Leadership may be perceived at the group level but not between dyads as discussed in other research (e.g. Epitropaki and Martin (2013)). Edwards and Gill (2012) found that Transformational Leadership is equally effective at all hierarchical levels but that transactional leadership becomes less effective at higher levels. Furthermore they discovered a mixture of transformational and transactional styles at middle and lower levels, whilst at higher levels Transformational Leadership was widespread. The authors surmise that some degree of transactional leadership is required at levels where steady work output is required, whereas at higher levels the management of change and organisation-wide goals require higher-order motivation (*Ibid.*). Edwards and Gill (2012) used the same MLQ factors for this research as reported by Edwards et al. (2012) and not a single transformational factor.

The Full Range Leadership Model is supported by a meta-analysis conducted by Judge and Piccolo (2004), from which leadership scholars generally agree the applicability of the model (Gill, 2011) (see also Bass (1998); Bass and Bass (2008)). There remain issues with the configuration of MLQ factors to specific contexts (Edwards et al., 2012; Edwards and Gill, 2012). This and the findings on leader-follower similarity (Bono et al., 2012; Felfe and Schyns, 2010; Schyns and Sanders, 2007; Felfe and Schyns, 2006) suggest that the Full Range Leadership Model is not as generalisable as Bernard Bass originally stated (Bass, 1998; Bass and Bass, 2008). This may be because many of the confirmatory studies were conducted in the USA and fail to account for cultural variation (Edwards et al., 2012). The validity of the model at the intersection between Transformational and Transactional Leadership has also been questioned (Gill, 2011). This leaves *contingent reward* in a grey area between the two types of leadership, although it is generally believed to be a part of transactional leadership (*Ibid.*) The Full Range Leadership Model as stated by Bernard Bass (Bass, 1998: 136) claims little variation in levels of MLQ factors based on hierarchical level. However recent research disputes this: it seems that Transformational Leadership is found more consistently at higher levels while a complex mixture of transformational and transactional approaches is appropriate at lower levels (Edwards and Gill, 2012; Gill, 2011).

There has also been criticism of *laissez-faire* leadership as it does not appear to be a type of leadership at all (Gill, 2011: 82). Another possible oversight in main-stream Transformational Leadership research is a lack of analysis of the negative consequences of transformational leaders. For example follower dependency may be a consequence of highly Transformational Leadership which stymies individual creativity (Eisenbeiß and Boerner, 2013). This aspect of Transformational Leadership as well as the Full Range Leadership Model may be due to its undue attention on the positive aspects of leadership. As the term *transformational* suggests, it is a heroic notion of leadership. As noted by Felfe and Schyns (2010) leadership research (including transformational research) rarely

considers the results of followers' influence on leaders. Despite the clear evidence that followers and leaders negotiate their relationships (e.g. Bono et al. (2012); Felfe and Schyns (2010); Schyns and Sanders (2007); Felfe and Schyns (2006)), Transformational Leadership theory continues to largely consider the effects of transformational leaders on their followers and on leadership outcomes.

### 2.8.2 Vision and charisma

Visionary leaders are those who demonstrate transformational features but usually concern themselves with the alignment of followers to organisational goals (the vision). They are considered to have self-efficacy, power orientation and cognitive skills (Gill, 2011: 91). However this theory remains a strand, as yet not integrated with other leadership theory (for an exception see (Gill, 2011: 108)).

Charisma, on the other hand, has long been considered to be important for leadership. However, it was Max Weber who first formulated the effect of charisma on followers (Gill, 2011: 91). Charismatic leadership is historically viewed in heroic terms and associated with leaders' personal qualities. It was considered to inspire followers to transcend everyday constraints (*Ibid.*). Consideration of charisma in this manner is somewhat unsatisfactory since it does not explain in detail how charisma works and under what circumstances. The lack of theoretical detail concerning charisma caused Bernard Bass and Bruce Avolio to develop the Full Range Leadership Model (Felfe and Schyns, 2010).

As with the Full Range Leadership Model most, if not all, of the "New Leadership" theories are heroic in nature and focus on individual leaders at the cost of a wider perspective (Gill, 2011: 93). They also fail to explain the role of vision, mission, culture and organisational values in leadership (*Ibid.*). However, recently (as described above) follower characteristics, context, hierarchical levels, levels of analysis and leadership processes are emerging in the transformational literature, suggesting that it will continue to develop and be highly influential.

### 2.8.3 Authentic leadership

The authenticity of leaders is, surprisingly, a relative newcomer to the leadership studies canon (Cooper et al., 2005). Essentially heroic, authentic leadership was derived from transformational leadership (Nyberg and Sveningsson, 2014). An attempt to promote the effectiveness of self-aware leaders the approach, nevertheless, is leader-centric. It is arguably the recent loss of confidence in high profile leaders which has increased the importance of honesty in leadership interaction (*Ibid.*). An increase in corporate and political scandals, in addition to a rise in global terrorism in the early part of the century spurred an increased interest in the ethical aspects of leadership (*Ibid.*). Authentic leaders are defined as being self and situationally aware, perceived as such by followers and of high moral character (*Ibid.*). At the time that Cooper et al. (2005) published their article in a Leadership Quarterly special issue on authentic leadership, the approach was still at an early stage. The definition and instruments of measurement were ill-defined, causing them to suggest that exploratory qualitative methods should be developed to refine the field before quantitative methods were developed (*Ibid.*). Furthermore authentic leadership can be confused with other leadership

paradigms, such as transformational, charismatic and servant leadership (Cooper et al., 2005) *op. cit.*.

The development of authentic leadership has been rapid over the last decade resulting in a refined definition including elements of self awareness, internalised moral perspective, balanced processing of information and relational transparency (Walumbwa et al., 2008; Gatling et al., 2015). These elements were used in the development of a quantitative instrument: the Authentic Leadership Questionnaire (ALQ) by Walumbwa et al. (2008). The ALQ was shown to be related to, but distinct from ethical and transformational leadership as well as positively correlated to beneficial work outcomes (*Ibid.*). Although the development of empirical methods was a success there remained some issues with discerning between authentic and transformational leadership. The ALQ results from Walumbwa et al. (2008) also remain highly contextualised (*Ibid.*). Other recent studies have used the ALQ to test the effect of authentic leadership on motivational factors and engagement, such as Gatling et al. (2015) and Edu-Valsania et al. (2016). Although these have shown positive correlations both studies have limited generalisability and cross sectional design (Gatling et al., 2015; Edu-Valsania et al., 2016).

A criticism of authentic leadership is the paradox between honest and beneficial leadership behaviour (Nyberg and Sveningsson, 2014). This has led to managers complaining that behaving in a “true to yourself” manner triggered a negative response in followers (*Ibid.*). Honesty does not always pay. This can lead to identity problems for leaders born from the struggle to be true to oneself and also meet the implicit leadership ideals of followers (*Ibid.*). Nyberg and Sveningsson (2014) also conclude that authentic leadership is idealistic and maybe impossible to achieve in reality. A study of the life of Nelson Mandela revealed that he carefully (with fellow ANC members) constructed his public image for the cause, yet he is often cited as an authentic leader (Ciulla, 2014). This article is especially useful in framing the paradox of authentic leadership: that great leaders are often associated with authenticity yet they necessarily avoid authenticity to become great.

## 2.9 Post-heroic leadership

The remainder of this chapter is concerned with post-heroic notions of leadership. I contrast modern approaches to leadership with the traditional leader-centric view. Earlier in this chapter, I outlined how the “Great Man” view of heroic leadership has been prevalent since antiquity (Gill, 2011: 63). This notion of leadership reached its peak with Thomas Carlyle, who is credited with devising the true “Great Man” theory in 1840 (Spector, 2015). It is in Carlyle’s public lectures of that time that a truly heroic leadership narrative can be seen. However, even at this time, the chimeric image of idealised leadership came under the attack of Herbert Spencer, who countered that social forces shared greater responsibility for change than heroic leaders did (*Ibid.*). In this dialectic the seeds of the modern post-heroic narrative were sown. Post-heroic views are based on a dissatisfaction with the leader-centric nature of leadership studies. They turn away from a view leader differences as an explanation of all leadership outcomes and they refute leaders’ agency to dominate passive followers in order to achieve success.

Post-heroic approaches have attracted criticism as unbalanced in their follower-centric bias and

even as anti-leadership. However, for the most part, post-heroic explanations do not aim to supplant the role of leaders, but simply to balance what is seen as an unduly leader-centric historic approach. The following sections outline some of the main developments of the post-heroic approach. In some cases (e.g. Romance of Leadership theories) there is a deliberate effort to problematise traditional approaches to leadership. Other theory (e.g. Evolutionary Leadership Theory) may not deliberately challenge heroic leadership but, nevertheless, describes an environment where leadership is contested or negotiated. I do not portray post-heroic leadership as beginning where Transformational Leadership ends. As stated earlier, the debate about the agency of leaders is actually much older than that, dating back to *at least* the time of Carlyle. Although I have categorised Transformational Leadership as heroic, based on the majority of literature, its development has incorporated follower-centric ideals (e.g. Bono et al. (2012); Felfe and Schyns (2010); Schyns and Sanders (2007); Felfe and Schyns (2006)). I suggest instead that post-heroic conceptualisations of leadership have a long history but are growing in importance, gradually merging with more influential main-stream research such as Transformational Leadership.

### 2.9.1 Romance of Leadership (RoL)

The late James Meindl was an important scholar responsible for the concept of Romance of Leadership (RoL) (Meindl, 1985). Meindl and colleagues made the leadership community aware of a serious methodological issue in leadership studies: the bias towards ascribing positive outcomes to effective leadership (Meindl, 1985; Meindl and Ehrlich, 1987; Meindl, 1995). This bias might be better called hubristic (e.g. (Collinson, 2012)) but the notion of an unduly *romantic* view of leadership resonated with some leadership scholars. For example Meindl and Ehrlich (1987) and Meindl (1985) demonstrated the link between romantic conceptions of leaders and the attribution of organisational success to them. As Meindl stated, crediting leaders with organisational success without question “is a mistaken view” (Meindl, 1995). This position resulted in criticism of the RoL approach as “anti-leadership”, although it was intended to complement leader-centric leadership theories (*Ibid.*). Later Meindl and other RoL researchers would argue for a focus on followers as necessary to balance the bias. The basis of this argument was the lack of follower-centric research with which to integrate the existing leader-centric work (Meindl, 1995). As Meindl (1985) stated, leadership remains a vaguely defined construct, fragmented and plagued with methodological problems. This was almost a decade after Pfeffer (1977) had pointed out similar concerns over the definition of leadership and understanding how leaders effected organisational output. Pfeffer suggested leadership could have a significant symbolic component. RoL researchers wrote radical papers which had a profound effect on leadership studies (e.g. Meindl (1985); Meindl and Ehrlich (1987); Meindl (1995)), even causing some scholars to call for the end of leadership studies altogether. However, RoL researchers aim to complement the pre-existing leader-centric literature, not overturn it (Bligh et al., 2011; Schyns and Sanders, 2007). For example, recent RoL research has sought to integrate transformational approaches by using it to explain the effect of charisma (Schyns et al., 2007). Although Meindl’s original research was not explicitly follower-centric it formed the basis for later follower-centric approaches (e.g. (Bligh and Schyns, 2007))

The RoL was defined as the bias or incorrect assumptions about the importance of leadership in predicting organisational outcomes (Meindl, 1985, 1995). Critically, RoL posits leadership as a social construction that followers develop based on their context. This includes the relationships

between the leaders and followers themselves (Meindl, 1985, 1995). It also suggests that followers are less under the control of leaders than is generally considered (*Ibid.*). Traditional leadership studies focus on leader differences, often their personalities. RoL theories assume that it is leaders' personality characteristics as *they are perceived* (not clinical measurements) that are important (Meindl, 1995). Therefore variation in follower ratings of leadership is not assumed to be directly due to variations in leadership behaviour. This allows for the possibility of leadership emergence such that leaders may become prominent without assignment to a hierarchical position (*Ibid.*). RoL predicts the existence of informal leadership structures as well as formal ones.

The role of followers has been, as we have seen, been thrust to the fore by the critical analysis of Meindl (1985) and Meindl (1995) even though they barely mention follower-centric concerns (Bligh et al., 2011). However RoL theories compel study of the role of followers (Bligh and Schyns, 2007). Other research directions which are implicated by this work are: understanding the antecedents of followership, the role of credit and blame in leader reputation, expectations of leaders' and followers' performance and susceptibility to romance effects (Bligh and Schyns, 2007). The connection between RoL and Implicit Leadership Theories (ILT) has also been made by Felfe and Petersen (2007) who claim RoL is a type of Implicit Leadership Theory.

The casting of leaders as responsible solely for organisational outcomes may be due to a binary approach to leadership (Collinson, 2005). Traditionally, leaders have been categorised as good or bad or as David Collinson puts it "heroes or villains" (*Ibid.*). Our tendency is to assume the former category and this seems relevant to other leadership categories: control/resistance, consent/opposed, men/women (*Ibid.*). Our default perception seems to be the first of each of these dichotomies. The issue of resistance, for example, is an area often overlooked in leadership studies (Collinson, 2012) but we shall see in the next sub-section that resistance has important implications. Unduly positive considerations of leaders may result in hubristic interpretations of expected behaviour, which collapse the romantic perceptions of followers, resulting in resistance (Collinson, 2012).

A number of new opportunities for research evolved from the RoL literature. For example the role of reputation may be more important than personality if leadership is contingent upon a process of social construction (Meindl, 1995). As trait-process theories suggest, antecedents for leadership so RoL theories suggest that acts of followership have pre-cursors (*Ibid.*). Followership processes are largely the product of interaction between followers, via which leadership criteria are established (*Ibid.*). This networked process of negotiation implicates social network methodologies. Meindl and colleagues suggested analysis of density and centrality variables in social networks as well as social contagion studies would be beneficial in RoL analysis (*Ibid.*).

A comprehensive review of the last 20 years of RoL research was conducted by Michelle Bligh and colleagues (Bligh et al., 2011). The review states that three themes have emerged: the mis-attribution of leadership, follower-centric studies and social construction of leadership including network approaches (*Ibid.*). As they point out "we continue to have highly romanticised, heroic views of leadership" (Bligh et al., 2011: 1059). If anything the heroic view of leadership has been undermined further by global events such as economic crashes which underline the point that single leaders cannot control nations or economies as is often believed (Bligh et al., 2004). The Bligh et al. (2011) article is based upon a meta-review of 91 papers of RoL significance. Many of the researchers

cited are actively involved in research of more traditional forms suggesting a synthesis rather than an antithetical stance. Areas of research to which RoL research has contributed are as follows:

1. Biases in mis-attributions of leadership
2. Biased attribution for organisational failures.
3. Mechanisms for mis-attributions.
4. Follower and situational influences.
5. The role of follower interpretations in leadership ratings.
6. Implicit Leader-Follower theories and the social construction of leadership including inter-follower and social contagion processes.
7. The role of crises in leadership perceptions.
8. Media portrayal of leaders and the social ecology of leadership.

In fact, although RoL theories are seen as skeptical about the attribution of leadership to outcomes, they do not dismiss them. RoL theories, like traditional approaches, assume a leadership effect but disagree about the degree (Bligh et al., 2011). Also leadership scholars outside of the RoL domain are all too aware that research has been too easily lured into convenient survey designs which assume followers have a need for leadership and that they can accurately report leadership differences (Hunter et al., 2007). Such research has imagined leadership in unnecessarily heroic terms (*Ibid.*). As Bligh and Schyns (2007) point out leader-centric theories are “double-edged” since not only do they credit leaders when organisations are successful, they also damn them when they are not. RoL theories must, therefore, aim to discover to what extent organisational outcomes can be attributed to followers and situational variables. They must also seek to discover to what extent followers then attribute these outcomes to leaders, whatever the circumstances and the social processes by which they do this (*Ibid.*). These processes are likely to be inter-follower dynamics including social contagion. Added to these are the external factors of crisis and uncertainty plus media coverage of leadership activity (*Ibid.*). From their review Bligh et al. (2011) suggest three directions for future research. Firstly they recommend the exclusion of previous successes or failures from studies of leadership perception. As stated earlier, social network analysis of group dynamics and social contagion are suggested. Finally, leader reputation and image management are beneficial channels for RoL research. My research focuses on two of these suggestions: the use of social network analysis and leader reputation (specifically prestige).

## 2.9.2 Shared and distributed leadership

Heroic theories of leadership tend to assume that individuals are capable of resolving difficult problems on behalf of an organization or group (Bligh et al., 2011). As Keith Grint has pointed out in numerous articles, many problems are intractable and not amenable to quick and decisive action (Grint, 2005, 2009, 2010, 2014). The inability of leaders to discern *wicked* problems due to hubris can make organisations particularly susceptible to complex threats (Grint, 2010). This analysis

exposes Carlyle's Great Man and implies that some situations warrant multiple leaders.

Distributed and shared leadership theory became popular at the beginning of this century although their routes can be traced much further back (Bolden, 2011). Whereas RoL, rightly or wrongly, has been associated with an anti-leadership bias; distributed leadership suggests that leadership structures alter as the situation changes (Gronn, 2000). More specifically leadership passes from person to person in order to maximise the cognitive power of the group over a range of sub-tasks (*Ibid.*). A number of subtly different interpretations of distributed and shared leadership exist (*see Bolden (2011); Gronn (2000) for a review.*) although I will focus on common themes. Peter Gronn's definition of distributed leadership maintains that leaders are necessary, or at least useful, but the the function of leadership can be distributed (although it is essentially unaltered) (Gronn, 2000).

The concept of distributed and changing leadership behaviours where leaders and followers collaborate, switching roles as the task demands, is placed within relational theories of leadership (which include LMX and SNA) (Uhl-Bien, 2006). The overlap of distributed leadership and SNA is highlighted in research which uses centralisation and density indices to define distributed leadership in teams (e.g. Mehra, Smith, Dixon and Robertson (2006). This complex view of leadership necessarily incorporates multiple levels of study, leading to it being proposed as a new unit of analysis by Gronn (2002). Multi-level analysis is known to support rigorous methodology (Yammarino and Dansereau, 2011). Despite these advantages distributed leadership has failed to achieve mainstream appeal and has remained mostly within the educational sector. However, with "disillusionment" in the New Leadership School, it is beginning to gain momentum (Bolden, 2011).

Since 2000 there has been a sharp increase in publications featuring both distributed and shared leadership (*Ibid.*) The distinction between distributed and shared leadership is vague and, in many cases, the two are used interchangeably. Despite this Bolden (2011) states that distributed leadership can be identified by its conceptualisation of leadership emerging from networks, its openness to leadership boundaries and acknowledgment of expert power across the network. However, this definition remains very similar to that of shared leadership where a proclivity towards network approaches remains an important feature (Contractor et al., n.d.). Like distributed leadership, shared leadership is a systemic perspective of leadership studies which has become more popular since 2000 as an antithetical approach to heroic leadership (Contractor et al., n.d.). A clearer distinction is made by Gill (2011) who states that distributed leadership as the dispersal of authority down the chain of command, as opposed to shared leadership where authority and responsibility is shared between peers (p.30). Shared leadership not only includes a systemic approach and emphasis on network methodologies, it also assumes a dynamic and interactive process but with a focus on lateral interactions rather than vertical ones (Contractor et al., n.d.).

Distributed and shared leadership have not sufficiently explained how emergent leaders are affected by power structures which are far less mutable and dynamic than informal networks (Bolden, 2011). There also remain research gaps concerning the boundaries of distributed leadership structures (*Ibid.*). Grint (2010) also points out that critical or "sacred" aspects of leadership such as leader distance and the cost of leadership must not be ignored. Gill (2011) warns against the assumption that distributed or shared leadership is an improvement on individual leadership in all cases, in fact

the dispersal of authority should accompany more traditional arrangements as appropriate (p.33). This echoes Gronn (2000, 2002) who states distributed leadership is not an alternative to individual leadership. Similarly Mehra, Smith, Dixon and Robertson (2006) found that distributed leadership does not always improve team performance.

Distributed and shared leadership clearly adopt a post-heroic approach and describe interactions between leaders and followers. The mechanisms by which leaders emerge are not as clear although network approaches can indicate who the emergent leaders are. The approach describes positive leadership behaviours leading to engagement but does not describe how disengaging behaviours could lead to negative follower behaviours such as disengagement.

### 2.9.3 Servant leadership

Among the relational theories (such as LMX, shared and authentic leadership), servant leadership is also gaining profile in leadership studies for similar reasons. The drive to explore the ethical aspects of leadership from the beginning of the century caused scholars to reinvigorate the notion of servant leadership, established by Robert Greenleaf in 1970 (Dierendonck, 2011) (see Greenleaf (2002) for full explanation of the seminal description of servant leadership). Servant leadership redefines leaders as those who are motivated to serve their followers, helping them to achieve their goals but not acting in an authoritarian manner (Liden and Wayne, n.d.; Dierendonck, 2011; Greenleaf, 2002).

Compelling as the notion is, servant leadership remains a vague and poorly defined concept (Dierendonck, 2011). Qualitative work has failed to adequately describe servant leadership, focussing instead on idealistic exhortations. Empirical research is based on no fewer than nine separate and distinct instruments (*Ibid.*).

Dierendonck (2011) reviewed and synthesised the 44 published characteristics of servant leaders into six: empowerment, humility, authenticity, interpersonal acceptance, providing direction and stewardship. The article also discussed the antecedents and consequences of servant leadership, as well as comparing the numerous servant leadership models. In organising the disparate theoretical fragments Dierendonck (2011) made an important contribution to servant leadership.

As servant leadership matures and empirical techniques develop, a growing accumulation of evidence links servant leaders with positive outcomes (Chiniara and Bentein, 2016; Liden and Wayne, n.d.). The process by which servant leadership serves these goals is not yet understood, although Chiniara and Bentein (2016) have established the role of psychological needs in linking servant leadership and positive outcomes.

Servant leadership may be as romantic as heroic notions of leadership. McCrimmon (2010) argues that servant leaders are only pertinent in specific occupations such as politics, but business leaders must prioritise their organisational goals over the development of followers. He also argues that servant leaders are paternalistic, allowing followers to become dependent, preventing engagement (*Ibid.*). Often cited as a post-heroic approach, servant leadership still focuses on the behaviour of leaders primarily, although Dierendonck (2011) also considers the reciprocal relationships between leaders and followers. Servant leadership superficially satisfies my research interest in moving away



from heroic leadership. However, although interaction is considered, it is largely one sided, based on leader behaviour. Although servant leadership promises a more comprehensive understanding of leadership processes (e.g. Chiniara and Bentein (2016)) it cannot yet explain the process fully (*Ibid.*) or in all situations (McCrimmon, 2010).

#### 2.9.4 Implicit Leadership Theories (ILTs)

ILTs are theories based on the notion that people have different ideas of what a leader should be (Bass and Bass, 2008: 48). As a result a list of universal leadership traits is unlikely to be an acceptable fit for everyone. ILTs therefore attempt to discover a suitable leadership “prototype” for each organisation, team or group (*Ibid.*). Since ILTs *start* with follower notions of leadership they break with the heroic tradition. ILTs, however, still assume that organisational outcomes are largely attributable to leaders. They have also been described as “naïve” by (Bass and Bass, 2008: 49), as most lists of leadership attributes turn out to be very similar, making them indistinguishable from other leadership theories. Implicit traits are intentionally contextual and therefore not always generalisable (*Ibid.*).

#### 2.9.5 Resistance to leadership

Resistance to leadership is a little studied area of leadership (Collinson, 2012). I contend that resistance is ubiquitous, that followers need to be convinced before they commit acts of followership and that unconvinced would-be followers are, by definition, resisters. That this apparently obvious feature of leadership is so rare in leadership studies is symptomatic of the heroic agenda which discusses only one side of leadership dualisms (Collinson, 2005). Therefore studies which analyse resistance are heroic or “post-transformational” in nature (*Ibid.*).

Collinson (2005) is a study of the dialectics of the leadership narrative. Collinson urges researchers to consider apparent opposite sides of leadership in order to understand it better. One of his three themes is that of control/resistance. Leadership researchers have tended to either ignore resistance or to consider it as abnormal (*Ibid.*). Contrast this with Boehm (2001, 1993) who considers ambivalence to leadership to be a universal human trait. Christopher Boehm is not a leadership scholar but a primatologist, so it is only recently that the impact of his research has extended to leadership studies along with other anthropologists. Rather than an abnormality resistance is, in fact, an inescapable consequence of power (Collinson, 2005; Foucault, 1979). However, in citing Foucault’s framing of surveillance as a punitive power Collinson places the weapon in the hands of leaders and does not discuss the potential for subordinates to monitor their bosses (Collinson, 2005).

Resistance can take many forms, the most obvious being extreme action such as trade-union activity or direct opposition (e.g. Collinson (2012, 2005)). However, more subtle methods are observed in the resistance literature such as distancing behaviour (van der Kam et al., 2014; Collinson, 2005), disengagement (Collinson, 2012, 2006) and the use of humour (Collinson, 2002; Rodrigues and Collinson, 1995). Dick and Collings (2014) suggest a Foucauldian description of subtle and ubiquitous resistance strategies concealed within mundane interactions.

In leadership studies causes of resistance have usually been ascribed to leader behaviours. It seems natural, in a paradigm where resistance is viewed as aberrant, to believe that its causes are due to equally disturbing behaviour such as hubris (Collinson, 2012), inconsistent leader behaviours (Collinson, 2005), coercion (Chong, 2014) and leader self-enhancement (van der Kam et al., 2014). Conversely, Dick and Collings (2014) describe resistance as a part of the ever-present obstruction of power through subtle and everyday interaction. Discussions about the obstruction of power refute the heroic discourse that established hierarchies have overthrown collective leadership. Far from being a recent phenomenon leadership literature is starting to include an older view from anthropology: that collective leadership is ancient. Sveiby (2011) draws leadership lessons from Aboriginal pre-history including what he terms “upside down hierarchies”. The stories drawn from pre-history are cautionary tales to warn the overly ambitious of the perils of hubristic leadership (*Ibid.*); their role is to keep would-be leaders in their place. In “upside-down hierarchies” the dominant are controlled socially; they are dominated by the followers they seek to control.

These theories find their source in Christopher Boehm’s Reverse Dominance Hierarchies (Boehm, 2001, 1993). Boehm claims that humans are ambivalent to leadership: one would wish to dominate (to increase reproductive success) but not to be dominated (*Ibid.*). The result is that simple societies have formed complex strategies to limit the influence of would-be leaders. Such strategies may begin with gossip, humour and ostracism but may ultimately be extremely violent (e.g. execution) (*Ibid.*). These strategies are known as levelling strategies: they aim to reduce power differentials to minimum. If they survive in modern complex society they support Boehm’s assertion of universal ambivalence (Sveiby, 2011; Boehm, 2001, 1993) and Foucault’s assertion of continual resistance (Dick and Collings, 2014; Collinson, 2012).

Another explanation for the ubiquitous resistance to leadership is in the psychological theory of reactance. According to this theory influence is resisted wherever it is viewed as an infringement of individual freedoms (Brehm and Brehm, 2013). This has important consequences in key social areas. For example, public health warnings concerning the dangers of smoking could be perceived as telling smokers how to behave, inducing reactance which actually prevents smokers from quitting (Cho et al., 2016). Despite reactance theory being developed in the 1960’s (Brehm and Brehm, 2013), it has not made a noticeable impact on leadership studies (but see Hoyt and Blascovich (2007)). Yet reactance is a well established and empirically supported theory in common usage in other areas of psychology (see Hoyt and Blascovich (2007) *op. cit.*). Critically, it provides an explanation for ambivalence to leadership broadly similar to levelling strategies.

Torrance (1957) also discovered resistance to leadership where individuals, in a military organisation, agreed to a plan of action set by a leader but failed to fully commit. This is a well known phenomenon in the RN, known as “comply-and-evade”. Similar behaviour was noted in US Army exercises by Sonnenwald and Pierce (2000). Difficulties with personal relationships with high status individuals can also lead to overcompliance, a behaviour which avoids punishment by conspicuously following orders beyond their original mandate. Overcompliance is a negative behaviour employed by followers to escape conflict or to deliberately suspend thoughtful execution of one’s task (Torrance, 1957). In both cases team performance is mitigated by the behaviour. The topic of overcompliance appears in journals covering behaviour and economics, regulatory behaviour and commercial law (e.g. Dehart-davis et al. (2001)). Torrance’s discussion of hierarchical behaviour

and team performance on a U.S. air base (Torrance, 1957) is a rare addition to the leadership studies literature on the nature of subtle resistance.

## 2.9.6 Evolutionary approaches to leadership theory

### Introduction

Leadership studies are dominated by leader-centric descriptions (Meindl, 1995; Edwards, n.d.) and tend to utilise constructs from psychology (e.g. personality traits). Commentary about leadership in anthropology, however emphasises follower strategies to at least the same degree as leadership behaviours. Leadership studies are increasingly turning to anthropology to explain leadership (Edwards, n.d.). In fact most studies of leadership occur in modern western contexts where a heroic outlook prevails. Many contemporary peoples, by contrast, exhibit egalitarian and distributed leadership (e.g. (Edwards, n.d.; Briggs, 1970)). Evolutionary Leadership Theory (ELT) is a recent approach which departs radically from heroic notions of leadership (Van Vugt and Ahuja, 2010: 26). ELT is a cross-disciplinary approach to leadership which combines theory from anthropology and evolutionary psychology (EP), evolutionary biology and Game Theory (*Ibid.*). ELT criticizes traditional leadership theories as overplaying the role of leaders themselves and lacking theoretical integration (Van Vugt et al., 2008). Furthermore, evolutionary approaches are becoming more important in all social research (*Ibid.*). ELT casts leadership as the solution to group coordination problems of social animals. There follows a need for followership since followers benefit from group coordination and enjoy advantages over members of competing groups (King et al., 2009; Van Vugt et al., 2008). This goes some way to resolving the question of why followers allow themselves to be led in the first place (Van Vugt and Ahuja, 2010). Computer simulations following simple decision rules such as “follow the leader” demonstrate the utility of both leadership and followership. This is because choosing to follow enhances group coordination and reduces antagonism (*Ibid.*). The same simulations demonstrate that group coordination requires specific cognitive skills which would make skillful individuals a critical resource (*Ibid.*).

In this section I will review ELT but I will also incorporate evolutionary approaches from a number of disciplines which are, strictly speaking, outside of the ELT domain. Although ELT does not claim to be post-heroic its tenets surely are, especially its focus on follower behaviour. I therefore consider these evolutionary approaches as post-heroic in contrast to the leadership theory reviewed in the earlier sections of this chapter. As a departure from traditional leader-centric approaches, I have selected ELT (and other evolutionary disciplines) as the paradigm for my study of leadership-interaction. There are a number of objections to ELT, especially where EP has been incorporated, which I will review. Some of these objections rule out the use of specific assumptions so I highlight these and describe how ELT will apply to my research.

### Basic assumptions

ELT seeks to start afresh with an inquiry into power-seeking behaviour in general and why we need leaders at all (Van Vugt and Ahuja, 2010: 17). Equally it may be asked why followers allow themselves to be led, a situation which confers relatively fewer benefits than leading (Van Vugt and

Ahuja, 2010; Van Vugt et al., 2008). The answer to this question is sought in ancestral environments and the need for social animals to coordinate group activity, especially where inter-group competition exists (Spisak et al., 2014; McDonald et al., 2012; Van Vugt, 2009; Van Vugt et al., 2008). However, whether or not such a state of inter-group competition existed remains controversial (Bowles, 2009). Evolutionary approaches allow researchers to go back to first principles by considering the need for leadership in the first place (Van Vugt and Ahuja, 2010: 20). For leadership to be enduring, power seeking behaviour relies on motivations to lead and motivations to be led (*Ibid.*). Evolutionary approaches assume that leadership and followership behaviour are the results of psychological mechanisms which were selected in an ancestral environment (often referred to as the Era of Evolutionary Adaptedness (EEA)) (Van Vugt and Ahuja, 2010: 22). This is a controversial area in ELT and also for EP as an enduring criticism of the approach is the difficulty in defining the EEA (Laland and Brown, 2011: 124). While we may know very little about the human ancestral environment, behaviour which is adapted to a social environment is not controversial and this is likely to include group coordination (Bowles, 2009).

### **Game Theory and computational analysis**

ELT considers that leadership in animals can inform us about leadership in humans (Van Vugt and Ahuja, 2010; King et al., 2009: p43). Leadership in animals is also aimed at group coordination so many human strategies are recognisable to biologists and there is a lot of research to draw from in this area. Game theory, used often in biology, can also be used to describe leadership scenarios. Game Theory has been used extensively by biologists to research cooperation.

For example the Prisoners' Dilemma can explain why agents cooperate even when it does not appear to be in the agents' interest. The game considers two criminals caught and isolated in cells. By blaming the other criminal and protesting innocence one prisoner could walk free. Both prisoners may receive a larger sentence as a result, however. But if both cooperate by being silent they may receive a lighter sentence. The game is used to explain why cooperation is chosen despite self-interest. This issue is critical in understanding group coordination. In order to cooperate in groups individuals have to subordinate selfish motives for the benefit of the collective.

Understanding the mechanisms which achieve this are of vital importance to any analysis of group behaviour. Computer simulations using Game Theory can shed light on apparently mystifying self-sacrificing behaviour (Van Vugt and Ahuja, 2010: 56). When adapted to solve evolutionary dilemmas through the evolution of behavioural strategies, it is called Evolutionary Game Theory (King et al., 2009; Van Vugt et al., 2008). These approaches can also be applied to the cultural (rather than biological) evolution of normative behaviour. From a leadership perspective the motives for having leaders need to be resolved first. Computer simulations enacted through robots have demonstrated that led groups perform better than leaderless one (Pugliese et al., 2015). Research of this nature can be used to explain the *why* of leadership (but see also Van Vugt and Ahuja (2010); Van Vugt (2009); King et al. (2009) and Van Vugt (2009)).

## The cost of leadership

Like other forms of group-specific behaviour leadership often incurs a cost. Because the benefits received by leaders are often the focus of discussion, this notion may not be obvious. Examples can be found in animal behaviour. The temnothorax ant, for instance, demonstrates leadership by adapting its normal behaviour to lead the way to food sources for other ants. It takes the leader ant four times as long to get its food by doing this, but it can be demonstrated that the group benefits outweigh the individual sacrifice (Van Vugt and Ahuja, 2010: 44). Anthropological studies have demonstrated the need for sacrifice in order to be granted status. For example Smith and Bird (2000) show that prestigious hunters have to absorb the cost of their success and derive no material gain. However this costly signal of hunting prowess does earn the hunter status. Costly signalling is therefore not a levelling mechanism to limit the influence of powerful persons, but an honest demonstration of skill to obtain status.

Group coordination requires the sacrifice of individual goals, a factor which cannot be explained by reciprocity or kin selection alone (Henrich, 2006). In fact the degree of altruism exhibited in human evolution is not possible without enforcement by individuals who punish selfish behaviour; enforcement behaviour is called costly punishment (*Ibid.*, (King et al., 2009)). Punishment to enforce norms is costly as it creates agonistic interaction. It is also altruistic as it is used to prevent free-riders from benefiting from group effort without contribution (Henrich, 2006). Leaders are better placed to enforce social norms as the cost of punishing defectors or free-riders is less for higher status individuals (Flack, 2012). Leadership therefore requires sacrifice since it takes time and effort to lead, resources which could be spent simply pursuing selfish goals. Furthermore potential leaders are subject to levelling by skeptical followers (Boehm, 1993, 2001; Eerkens et al., 2009). Leaders also incur the costs of signalling their entitlement to earn status (Smith and Bird, 2000) and, once status is earned, leaders must enforce social norms through costly punishment (Flack, 2012; Henrich, 2006).

## Prestige

Because of the cost of overt assertion and dominance, leadership strategies have become more reliant on prestige. ELT differentiates dominance from leadership, the latter relying rather more on prestige (Van Vugt et al., 2008; Henrich and Gil-White, 2001). Prestige in a specialised area makes potential leaders a vital source of social learning which is superior to simple trial-and-error (Henrich and Gil-White, 2001). “Info-copying” prestigious individuals effectively trades useful social information for status and is one example of how leadership based on prestige may emerge in groups (Henrich and Gil-White, 2001; Van Vugt and Ahuja, 2010).

Prestige was identified early in social psychology as an important leadership factor (Asch, 1948) yet has not been considered much in leadership studies. As Asch (1948) put it “prestige and imitation are virtually interchangeable”(p. 250) which suggests a role for prestige in social learning strategies. Prestige has been considered by anthropologists as analogous to rank or position of dominance in zoological studies (Barkow et al., 1975). Barkow et al. (1975) maintained that instead of dominance hierarchies, an analogous drive for social esteem has evolved in humans. Furthermore the confirmation of status within certain individuals is based on the attention he or she receives, this is the basis of prestige and deference (*Ibid.*). Prestige is therefore an adaption of the older

dominance strategies to the cultural environment (Barkow et al., 1975).

Chudek et al. (2012) claims prestige “refers to learners’ preference for inferring cultural information from whoever receives more attention and/or freely conferred deference from other learners” (p. 2). Ethologically prestige can be measured by observing the amount of time others gaze at prestigious individuals (e.g. Chudek et al. (2012); Henrich and Gil-White (2001)). Cultural information is derived from high-prestige actors and these actors receive more attention. However Atkisson et al. (2012) define prestige more broadly to cover a number of strategies designed to increase proximity to prestigious individuals in order to obtain crucial social information and copy it. In other words prestige is defined by the number of individuals who attempt to imitate an actor.

Because humans have evolved to optimise the use of socially transmitted information, it is likely that individuals known to be reliable sources of such data will attract a higher level of prestige. (Henrich and Gil-White, 2001). With respect to high prestige individuals Henrich and Gil-White (2001) suggest an ethology whereby high prestige individuals and lower status persons may be identified by followers’ behaviour. In particular, they point out that high prestige individuals “*are listened to*” (p. 170). Specific behaviour associated with the clientèles of high prestige individuals is “infocopying” where followers are strongly influenced to the point of adopting similar language to a prestigious individual (*Ibid.*). The “information goods” theory advocated by these researchers includes an assumption that prestige is a consequence of the evolution of social learning in humans alone (*Ibid.*). With a preference for infocopying (to avoid the costs of individual learning) humans are likely to freely confer deference in order to obtain proximity to high prestige individuals who therefore accumulate followers as clientèles (*Ibid.*). The model suggested by Henrich and Gil-White (2001) is co-evolutionary. That is, it demonstrates the mutual evolution of genes (evolved social learning) with culture (deference to prestigious individuals). Henrich and Gil-White (2001) describe the following behaviours between prestigious individuals and infocopiers:

1. People preferentially copy skilled /successful individuals
2. Prestigious individuals are influential, even beyond their own domain of expertise.
3. Prestigious individuals are memorable.
4. Prestigious individuals, but not dominant ones, are preferentially copied in many behavioural domains.

Experiments have demonstrated that competent operators are more likely to be imitated than other forms of status (Baron, 1970). Perceived competence is also likely to make followers more likely to deal honestly with high-prestige individuals (Bickman, 1971). Learning from trusted models tends to result in convergence of knowledge, skills, values and beliefs which may explain the similarity between group members’ behaviours, and also the variation in between-group behaviours (Henrich and Boyd, 1998). This type of information is called cultural transmission and it is a powerful social force (*Ibid.*). However prestige-biased transmission is only one way that social information is disseminated. Social learning may be *unbiased* (copying randomly), *frequency-dependent* (copying the most popular ideas), *pay-off biased* (copying the most or least successful ideas) or *integrated* (a mixture) (McElreath et al., 2008). Pay-off biases include prestige-bias (*Ibid.*). As a family of strategies pay-off biases tend to be more successful over a wide range of scenarios (Kendal

et al., 2009; McElreath et al., 2008).

Prestige in humans is believed to be analogous to rank and dominance in other animals (Henrich and Gil-White, 2001). This implicates prestige in the complex series of interactions through which social structures emerges, described by Flack (2012); Boehm and Flack (2010). However complexity theory and status emergence are also discussed in leadership studies and, more broadly, in sociology and social psychology. Although not evolutionary in nature, I will discuss these theories in the following section as they are similar in many respects to the evolutionary notion of prestige. For example, Hogue and Lord (2007) use complexity theory to describe the emergence of collective structures over time, especially status. Similarly Mary Uhl-Bien and colleagues have published extensively on the complexity of leadership processes (e.g. Uhl-Bien et al. (2007)). Berger et al. (1980) outline a status organising process through which status characteristics (similar to traits) determine status. Schemas or idealised stereotypes also allow followers to recognise potential leaders and confer status on them (Ridgeway, 2001). A common criterion for assessing status is the resources held by a potential leader or their task-competence (Ridgeway and Balkwell, 1997; Ridgeway, 1987). Hogue and Lord (2007) describe networked individuals assessing status at the individual, dyadic and group levels with those ties being variously weighted according to notions of status. Similarly Clarke (2011) discusses the notion of respect, an often mentioned but rarely defined theme, in leadership studies (*Ibid.*). Clarke’s definition and categorisation of different forms of respect and their antecedents is also comparable to modern process based interpretations of leadership (e.g. Antonakis et al. (2012); Hogue and Lord (2007); Uhl-Bien et al. (2007)).

There is an overlap with anthropological notions of prestige and prestige building through complex interaction. Status, however, is not exactly the same as prestige. Prestige is defined as *freely conferred deference* with prestigious persons seen as useful for models for imitation or social learning (Henrich and Gil-White, 2001; Asch, 1948). This is only one type of status (Baron, 1970). Status is rather more determined by clearly visible cues such as socio-economic indicators (Bass and Bass, 2008: 170). Perceptions of status may, however, vary between individuals (Hogue and Lord, 2007). It is possible to have low-prestige, high-status individuals. The social construction of status described by leadership scholars (e.g. Hogue and Lord (2007)) is a valuable contribution to post-heroic attempts to define leadership processes. Although status is similar to the, mostly anthropological, definitions of prestige, the latter makes a unique contribution in defining the need for prestige as a mechanism for social learning (Henrich and Gil-White, 2001) and as an alternative to status which is confounded by social rank to a larger extent (Bass and Bass, 2008: 170). Because prestige is freely conferred it is more likely to have social impact outside of formal leadership structures than status.

## Integration with trait theories

It has also been demonstrated that the ‘Big Five’ personality traits may exist in animals and that they affect leadership outcomes. For example *bold* sticklebacks have been shown to routinely undertake leadership roles in foraging ((Van Vugt and Ahuja, 2010; King et al., 2009)). Different selection pressures could lead to inheritance of certain features which are immediately recognisable leadership traits. For example the hypothesised inter-group competitive scenario is likely to encourage the emergence of leaders with obviously masculine features (Spisak et al., 2012; McDonald et al., 2012).

Conversely a lack of competition encourages the adoption of feminine facial features since these are cues to cooperative behaviours (Spisak et al., 2012). Age is another easily observable marker with consequences for stable situations (where age is beneficial) or unstable situations (where youth is an advantage) (Spisak et al., 2014). These biological aspects of leadership (i.e. traits) have clear implications for leadership emergence (Spisak et al., 2014, 2012; McDonald et al., 2012; Van Vugt and Ahuja, 2010; King et al., 2009).

ELT also predicts dominant leaders will emerge in competitive situations where in-group coordination against out-group members is likely. Such situations will suit a number of cognitive traits such as general intelligence. In biology, as in leadership studies, there is speculation as to the propensity of heritable traits to be significant in leadership behaviours. Traits may include physical and morphological factors which make individuals more capable in certain situations or personality traits which predispose individuals to act first (Pugliese et al., 2015). Evolutionary robotics has demonstrated that individual behavioural traits randomly evolved in robots leads to stable leadership emergence. Furthermore over several generations robots' leadership styles progress towards active leadership (where leaders signal followers their intentions) (*Ibid.*). Mathematical models have also demonstrated that small differences in traits inherited by an otherwise homogeneous group can quickly become stable leadership dispositions (Eskridge et al., 2015).

### **Integration of situational theories**

ELT can also integrate situational approaches to leadership as distributed leadership is widespread among small-scale societies (Edwards, n.d.; Van Vugt and Ahuja, 2010; Eerkens et al., 2009; Eerkens, 2009; Van Vugt et al., 2008; Boehm, 1993). Through much of human existence it would have made sense for followers to defer only to leaders with specific relevant skills or knowledge naturally creating leaders for specific situations (Van Vugt et al., 2008). An example is war chiefs, physically powerful and aggressive men, who wield their power only in battle and defer to peace chiefs outside of conflict (Boehm, 1993). Situational considerations overlap with trait theories once we consider the likely physical attractors for specific situations. For example the physical indicators of leadership traits discussed earlier (Spisak et al., 2014, 2012). ELT has demonstrated that differences in simple traits in humans and animals can lead to stable leadership behaviours (Van Vugt et al., 2008).

### **The tension between leaders and followers**

Game Theory can demonstrate the need for leadership and stable strategies for leaders and followers (King et al., 2009) and also demonstrates the need for altruistic behaviour (Henrich, 2006). These include cooperation and strategies to punish those who do not cooperate (*Ibid.*). ELT suggests that the unstable environment which selected more altruistic social behaviour occurred around 2.5 million years ago; this environment moved leadership structures from dominance hierarchies to egalitarian bands (Van Vugt et al., 2008). These societies relied on prestige rather than dominance (*Ibid.*). Although many evolutionary theories have conflated dominance and prestige Henrich and Gil-White (2001) make a sharp distinction between the two. They outline important and easily identified differences in behaviour around prestigious or dominant individuals (i.e. ethological differences). After around 13 000 years ago hierarchical leadership re-asserted itself (Van Vugt et al., 2008).



However, ELT also claims that the prolonged period of egalitarian social structure led to adaptations which continue to encourage egalitarian behaviours based on prestige rather than dominance (Van Vugt and Ahuja, 2010; Van Vugt et al., 2008; Henrich and Gil-White, 2001). There also appears to be evidence that societies have flipped between hierarchical and egalitarian structures during their history (Edwards, n.d.; Aldenderfer, 2005).

Christopher Boehm's discussion of egalitarianism in humans (Boehm, 1993, 2001) has fueled many of the evolutionary and anthropological theories of leadership. This is largely because egalitarian societies such as those that exist today are self organising (Boehm, 1993), hinting that leadership could be superfluous. Since man's nearest living relatives, chimpanzees, form dominance hierarchies and today's society is somewhat hierarchical, scholars have been perplexed by the presence of strictly egalitarian societies (*Ibid.*). Although many have suggested this plasticity of behaviour is simply a human trait, Boehm drew his explanation from Freid's earlier description of levelling mechanisms (*Ibid.*). Levelling mechanisms allow a potential dominator to be dominated by the superior numbers of the group. The theory is elegant as it does not assume a switch in dominance behaviour. Humans retain their proclivity to dominate but use it against potential despots, thus maintaining an egalitarian ethos in small scale societies (which may be hardwired in humans generally (Edwards, n.d.; Eerkens et al., 2009; Boehm, 1993, 2001)).

There is evidence that egalitarian ideals are found throughout society and that cooperative structures are maintained by a widespread proclivity to punish transgressors (Henrich, 2006). Boehm (1993) noted 47 antagonistic behaviours in his study of egalitarian society the vast majority of which were provoked by dominant leaders. This prompted Boehm to state that humans are ambivalent to leadership, that is they accept leadership so long as it is beneficial (*Ibid.*). He called the suppression of assertive leaders a Reverse Dominance Hierarchy (*Ibid.*). The theme of ambivalence to leadership is central to ELT (see Van Vugt et al. (2008)) and goes further to describe universal resistance to leadership than theories from mainstream leadership studies (e.g. (Collinson, 2012)).

An important biological theory which may explain the evolution of leadership from egalitarian to hierarchical structures is that of niche construction (Spisak et al., 2015). When organisms interact and change their environment they effectively change the selection pressures on them. Study of the interaction between genes and culture is the co-evolutionary approach, and leadership could provide plenty of examples. As social pressures changed during the transition from foraging to complex society, so the selection pressures for hierarchical leadership may have changed with a preference for more assertive personalities (Spisak et al., 2015). This approach (when applied to leadership) emphasises the relationship between heritable traits and culture in order to resolve group coordination problems (*Ibid.*). Niche Construction Theory (NCT), unlike other evolutionary theories, emphasises the ability of an organism to alter its own environment and the consequent change in selection pressures for that organism (Spisak et al., 2015; Kendal et al., 2011). For cultural niches humans are likely be more adaptable because of our capacity for learning and disseminating cultural information (Spisak et al., 2015) resulting in faster adaptation than by purely genetic means (*Ibid.*). Leadership behaviours could create an organisational niche for certain leadership structures and this can co-vary with social organisation (*Ibid.*). Organisational niche equilibrium is achieved when the cost of deviating from a certain niche is greater than compliance (*Ibid.*). Because human history has furnished us with differing niches for prolonged periods, conflict between opposed strategies

(hierarchical and non-hierarchical) is inevitable.

Based on Boehm's assertions (Boehm, 1993, 2001) ELT assumes a universal ambivalence to leadership (Van Vugt and Ahuja, 2010: 112) and develops levelling strategies into STOPS (Strategies To Overcome the Powerful) (*Ibid.* 114). STOPS include gossip, public criticism, satire, disobedience and assassination (*Ibid.* see also Eerkens et al. (2009); Boehm (1993, 2001)). Boehm (1993) describes assassination as the "ultimate form of ostracism" (p.231). Leaders can adopt counter strategies called STEPs (Strategies to Enhance Power). Thus ELT describes the power struggle between leaders and followers more satisfactorily than heroic approaches. ELT researchers believe that history has furnished leaders the opportunities to use STEPs to create the hierarchies of modern society (*Ibid.*). This tension between leadership and followership explains the apparent fluctuation between hierarchical and egalitarian social structures throughout human history (Van Vugt et al., 2008; Aldenderfer, 2005). However, followers' innate ambivalence towards power and orientation towards small social groups with well known and humble leaders is mismatched with the modern situation. This mismatch hypothesis may explain the current base rate of 50-60 percent failure of modern western managers and leaders (Van Vugt et al., 2008).

### Multi-level approaches

In order to have an impact on modern leadership thinking, theories must demonstrate multi-level applicability (Yammarino and Dansereau, 2011). Therefore theories must operate at the intra-personal and interpersonal level from personal dispositions to individuals, groups and organisations. Any working theory must incorporate at least two levels (*Ibid.*). Examples include Markham (2012): a review of leadership structures in antiquity considering leadership style and organisational structure. In addition to the requirement for multi-level and processual studies of leadership (Antonakis et al., 2012), evolutionary models have demonstrated that variable effects at one level may be enhanced, counteracted or independent at other levels (Yammarino and Dansereau, 2011). Computer simulations can be extremely useful in this respect (*Ibid.*) and evolutionary studies furnish a number of examples (Pugliese et al., 2015; Van Vugt and Ahuja, 2010; Van Vugt, 2009; Van Vugt et al., 2008). Furthermore multi-level analysis enhances internal validity, creates innovative theory, reduces poor methodology and helps to integrate inductive and deductive methods (Yammarino and Dansereau, 2011). In organisational studies an evolutionary analysis of the linkages between individual behaviour and team performance is recommended by Yammarino and Dansereau (2011). My research design enables description of the leadership interaction process from individual to dyadic and group level outcomes.

### Criticism of evolutionary theory

Objections to ELT follow the form of criticism of evolutionary psychology in general which, although a larger subject, is based on the same assumptions. These objections are:

1. The inclusion of human behaviour with animal behaviour.
2. The assumption that behaviour is subject to evolutionary pressure in the same sense as physical adaptations.

3. Crude or vague descriptions of neurological functions such as “hard wiring”.
4. The assumptions that all inherited features convey reproductive fitness.
5. Incomplete understanding of the ancestral environment.
6. Dismissing human capacity for self-determination.

(Nicholson, 2005)

In fact most social scientists have no problem accepting humans as animals or with evolutionary selection of behaviour and culture. Many physical adaptations are neither adaptive nor maladaptive and, although theories of mind may, in many cases, be metaphorical there has been considerable progress towards understanding the neurology of behaviour (*Ibid.*). The ability of humans to escape natural selection seems highly unlikely to most scholars.

Nevertheless, the issue of the ancestral environment continues to be a stumbling block for evolutionary researchers. However, as Nicholson (2005) points out, a complete understanding is not critical. An understanding of the likely selection pressures creates hypotheses which can be tested. Game Theory and evolutionary robotics can be used without a detailed environmental description since simple rules can be applied to create useful simulations and mathematical models (Eskridge et al., 2015; Pugliese et al., 2015). However, evolutionary approaches may be threatening to scholars who adopt a traditional *tabula rasa* approach to human behaviour and have hitherto shunned empirical investigations and computational analysis (Nicholson, 2005).

## Conclusions

Ultimately there are three main consequences of ELT. Firstly, leadership cannot be studied without consideration of followers (Van Vugt and Ahuja, 2010; King et al., 2009; Van Vugt et al., 2008). Secondly, leaders and followers are to some extent in perpetual tension (Eerkens et al., 2009; Boehm, 1993). These factors do not preclude leadership, but status comes at a cost (Smith and Bird, 2000). Leadership is contested and is won through the costly signalling of specific traits or skills. Prestige rather than dominance is therefore the currency of leadership (Henrich and Gil-White, 2001). Finally, ancestral environments may have shaped modern behaviour (Van Vugt and Ahuja, 2010; King et al., 2009; Van Vugt et al., 2008). The final point is the most controversial and remains untested (Bowles, 2009). However, the first two points remain highly relevant to leadership studies as they move into a post-heroic era.

## 2.10 Literature review conclusions

In this chapter I have described the trajectory of leadership studies from the “Great Man” theories to post-heroic approaches. As I have shown, most leadership research is heroic, considering leader differences as the only or main factor in describing leadership outcomes. This view came under heavy criticism from the 1940s onwards and has gradually evolved to incorporate a greater appreciation of follower effects. These post-heroic theories incorporate a view that leadership is a process

which is created jointly by leaders and followers. Process based research into leadership has taken many form, the most pertinent of which I have described in this review. Trait process approaches (Antonakis et al., 2012; Dinh and Lord, 2012; Zaccaro, 2012, 2007) *start* with a trait in the traditional manner, but then depart from heroic leadership to consider the process of leader-follower interaction and the outcomes. In my research projects I do likewise beginning with the pre-existing competence framework in the RN (Young and Dulewicz, 2005, 2006, 2007, 2008, 2009). Starting with the leaders' competencies may seem counter-intuitive in a piece of post-heroic research but trait-process approaches do not seek to remove entirely the effect of leader-differences. Like RoL theories I do not reject leaders' competencies but attempt to balance these with followers' traits and behaviours (Bligh et al., 2011).

Situational leadership failed to demonstrate an empirical foundation, although the modern trait-process theories and competence approaches attempt to account for situation. Descriptions of resistance to leadership are rare in leadership studies (Collinson, 2012), suggesting that they are incomplete. Mainstream leadership theory also lacks theoretical integration (Van Vugt, 2009; Van Vugt et al., 2008). At the heart of these problems is a consistent bias attributing unrealistic effectiveness to individual leaders (Meindl, 1995).

Leadership scholars are also developing complex multi-level models of leadership which account for status (e.g. Hogue and Lord (2007)). However prestige has more scope for the emergence of informal leadership and is also based on the way formal and informal leaders manage information (Henrich and Gil-White, 2001). This evolutionary approach helps to describe why prestige is conferred in the first place, although some leadership scholars have also pointed out the utility of leaders who can offer specific resources (Ridgeway and Balkwell, 1997; Hogue and Lord, 2007) (see also French et al. (1959)). Information sources are implied in the leadership literature but anthropological and ELT literature is explicit and, furthermore, develops social learning and prestige building models.

Leadership analysis from anthropology suggests a more nuanced description of leadership which is contested and subject to popular scrutiny (but see (Torrance, 1957)). Such a model appears far more realistic and is based primarily on everyday interaction rather than hubristic illustrations of great leaders. ELT has integrated a number of these theories including the power of followers to resist leadership through levelling and the costly signalling of leadership entitlement through prestige.

As stated in Chapter 1: to study leaders and followers is to study interaction. The existing approach in the RN is heroic, based on leaders' competences, although these competences include the ability to interact. The empirical basis of the framework (Young and Dulewicz, 2005, 2006, 2007, 2008, 2009) may suggest that there is little left to contribute in this area. However post-heroic approaches do not attempt to replace leaders' traits but merely to put them into perspective (Bligh et al., 2011) and develop multi-level and complex models from them (Antonakis et al., 2012; Yammarino and Dansereau, 2011). The CCF is based on research which correlates superiors' views of individuals (as a dependent variable) with personality factors (Young and Dulewicz, 2005, 2006, 2007, 2008, 2009). A post-heroic development of these findings will complement them by adding a follower-centric view of leadership. The competence approach has been criticised for its simplifi-

cation of leadership processes by reducing complex situational factors into a neat list, the validity of which may be further reduced over time (as situational variables change) (Gill, 2011: 326). By developing a trait-process approach I hope to complement Young and Dulewicz's model with a multi-level complex view of interaction.

### 2.10.1 Research gaps

Trait-process approaches currently describe a high-level leadership process with little detail at the lower level; it remains a "black box" (Casimir et al., 2014). Competencies retain a reductionist approach and do not attempt to tackle the complexity of trait-processes. Missing from leadership studies is a complete understanding of resistance including subtle and continual conflict; although fragments exist (e.g. reactance (Brehm and Brehm, 2013), the use of humour (Rodrigues and Collinson, 1995) and overcompliance (Torrance, 1957)). Similarly, although respect is often mentioned in leadership studies, it suffers from definition problems and is yet to be integrated into mainstream leadership studies (Clarke, 2011). Status has been well documented in leadership studies (Hogue and Lord, 2007; Ridgeway and Balkwell, 1997; Berger et al., 1980) and is used to describe complex leadership processes (Uhl-Bien et al., 2007). However, status is also variously defined (Hogue and Lord, 2007) and implies, to a large degree, rank in social terms. Prestige, on the other hand, is an alternative to rank and dominance (Henrich and Gil-White, 2001) which makes it especially useful for defining informal leadership emergence.

Both resistance and prestige are forms of interaction. The research aims from Chapter 1 are refined as follows:

1. What modes of interaction are most effective in supporting leadership emergence, in the form of prestige?
2. What modes of interaction are most likely to improve team performance?
3. How do effective modes of interaction actually lead to better teamwork?
4. How do ineffective modes of interaction lead to resistance?

My study of leadership interaction will be described in the following four chapters which summarise each project, used to develop and explore a leader-follower interaction model. This is preceded by an account of Sequential Exploratory Design. Project 1 is an inductive piece of Grounded Theory designed to explore the opinions of followers on the subject of leadership-interaction. Project 2 is used to empirically test the theory, developed in the earlier project, based on descriptions of prestige. Prestige is defined as the degree to which individuals are the recipients of relational ties with other actors, using social network analysis (Wasserman and Faust, 1994). This allows prestige to be used as a measure of informal leadership emergence. Finally Project 3 tests the role prestige in infocopying. The resulting synthesis of qualitative and quantitative methods is used to describe a post-heroic evolutionary model of leadership interaction processes.

## Part II

### Part II: Data and Focal Theory (Projects 1-3)

## Chapter 3

# Methodology

*Ultimately, all leadership is to do with people. At every level, therefore, leadership can be distilled into a set of behaviours. These behaviours are the best way to handle relationships, convey the differences between command, leadership and management, and ensure that all three elements form part of getting things done.*

Source: Royal Navy way of leadership.(St George, 2012: 66)

### 3.1 Introduction

The aim of this short chapter is to orientate the reader to the data theory supporting Part II of this thesis. This part is primarily concerned with data theory and comprises this short overview, followed by a chapter for each of the three projects used to explore leader-follower interaction. The final chapter of this part is a discussion of the focal theory which has been refined from the data. In the discussion I use computer simulation to explore the consequences of my findings.

The use of a sequential exploratory design to research interaction means employing radically different approaches in each of the chapters. To introduce all of this data theory at the beginning is likely to be confusing for the reader. I have, therefore, explained each method in detail within the relevant chapter to prevent the need to continually refer back to this section.

However, it is still important to outline the methodological techniques and how they complement each other, and support the research aims. Therefore this chapter will outline the use of the sequential exploratory design and summarise the techniques used in each chapter.

## 3.2 Sequential exploratory design in support of the research aims

My research aims concern the processes of interaction. Although trait-processes are developing in leadership studies, the detailed activities that support leader-follower interaction and leadership outcomes remain as a “black box ” (Casimir et al., 2014). As I also set out in the literature review, resistance is a neglected area within leadership studies (Collinson, 2012). Finally, I aim, in the research questions, to discover how interaction leads to the gaining of prestige. To do this I follow an exploratory route. Thus, I begin with qualitative, exploratory research and develop empirical methods to test specific elements of the qualitative model.

Mixed methods (quantitative and qualitative) are able to mitigate the shortfalls of both frameworks (Creswell, 2009: 203). I have selected a sequential exploratory research design (Creswell, 2009: 206). Exploratory designs are those which feature qualitative work first in order to induce original insights before testing them quantitatively (*Ibid.*). The data sets for each project are separate so that the results of the qualitative work are used to develop the instruments in the quantitative projects (*Ibid.*:219). Rather than mixing the data by analysing the same data using different interpretive frameworks I connect the different data sets with my research questions (*Ibid.*:207). The research questions all concerned interaction, developing a “golden thread” through the research. The complete methodological design is shown at Figure 3.1.

### Leadership interaction research project (sequential exploratory design)

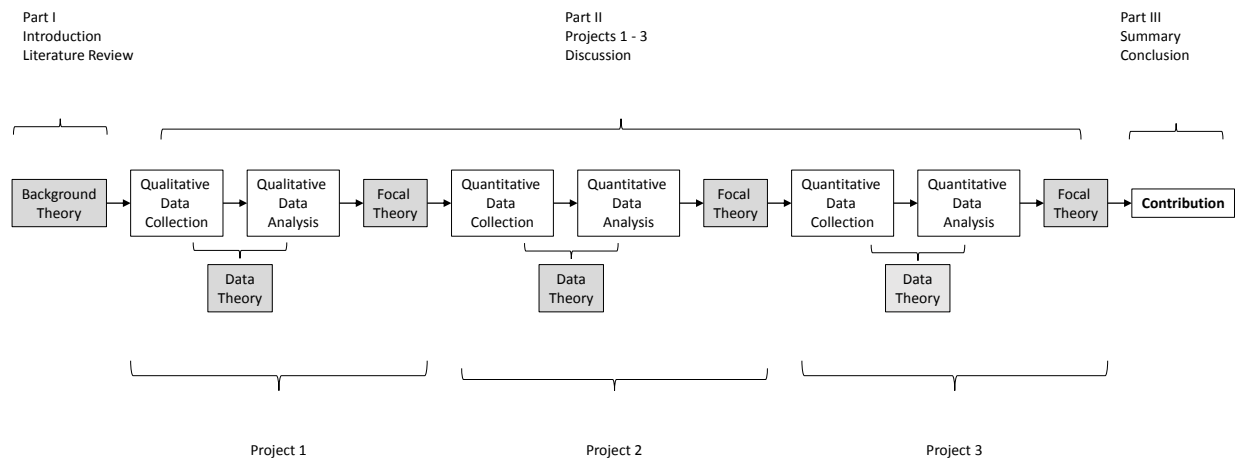


Figure 3.1: Thesis structure based on mixed methods research design.



### 3.3 Project 1 - Exploring interaction, resistance and prestige

Using the sequential exploratory design, I began by using a qualitative project (Creswell, 2009: 206) (*op. cit.*). I opted for the use of focus groups because this is a good method for capturing group dynamics (Morgan, 1996). This is of benefit in studying interaction, as I was able to observe interaction first hand. Using Grounded Theory, including recursive techniques, I was able to derive a rich description of leader-follower interaction. The advantage of inductive research is the detailed and comprehensive data, from which I was able to derive a highly contextual leadership interaction model. Qualitative research is often cited as having high internal/low external validity (Bryman and Bell, 2011: 56). Therefore, despite a detailed model, the findings were less generalisable than for quantitative research.

The data were collected in the form of interview transcripts amounting to 70 000 words. Combined with recursive techniques to enhance rigour, the project was data intensive and took a considerable amount of time to analyse. The result was new focal theory in the form of a leader-follower interaction model. Four methods of building prestige were discussed and incorporated in the model. A comprehensive description of subtle resistance in action was also obtained, satisfying one research question, although further research into resistance is still needed.

### 3.4 Project 2 - Validating prestige

The prestige building model was tested empirically in Project 2. Following Project 1, four methods of building prestige were incorporated into a questionnaire to assess the prestige of all the actors in a social network (the crew of a warship). Social network methods were used to define the prestige (rather than centrality) of all the actors and compare them to a dependent variable: team performance. I was fortunate to have access to reliable team performance data, although the distribution of the data necessitated a logistic regression for a binary outcome. Thus the new data theory incorporated into this project was Social Network Analysis (SNA) and logistic regression. This work was able to verify and quantify the effects of four types of prestige building networks on team performance.

The cross-sectional design of Project 2 reduced the internal validity but increased the external validity of the findings. The shortfalls are mitigated by the inductive basis for the data collection. Furthermore, the prestige findings are more generalisable than the results of Project 1.

### 3.5 Project 3 - Explaining prestige

Having established the role of resistance and confirmed that high prestige actors tended to achieve higher team performance, the remaining research question concerned how prestige leads to better performance. Following the analysis in Project 1 suggesting that information was key to prestige, and the prestige literature (e.g. Henrich and Gil-White (2001)), I set out to discover the role of social learning in prestige. Using SNA to derive prestige in the same manner as Project 2, I was able to test the role of prestige in allowing information to move through a network. I was able

to show that prestigious actors are “listened to” as predicted by Henrich and Gil-White (2001). Although this may not be the only way that prestige supports leadership outcomes, communication is of vital concern in effective teams. Again, this project uses cross-sectional design to verify a key part of the leader-follower interaction model and answers the research question: *how* does prestige support leadership outcomes. The sequential exploratory design allows this quantitative research to complement the earlier exploratory work. Although Project 3 used similar data theory to Project 2, there are many key differences in the independent variable, requiring a different data collection strategy.

### **3.6 Simulation - Describing the analysis of Projects 1-3**

Computer simulation was used in a discussion chapter at the end of Part II. The aim of the simulation was to take the results of the two empirical chapters and apply them at multiple levels. The computer simulation was used to apply the findings of the two projects at three separate levels. My aim in using computer simulation was to explore the multilevel consequences of the two previous projects and to discover whether informal leadership emergence (prestige) has wider consequences than affecting dyadic exchange. It is necessary to point out that the simulations are not a separate project but present the findings of Projects 2 and 3 in a novel way, allowing me to assess the impact of prestige building on team performance. This would not be possible with regression techniques alone

### 3.7 A summary of the methodology used in this research

A much more comprehensive discussion of the data theory occurs in each relevant chapter. However the information at Table 3.1 sets out the data theory for each project with its associated research question (listed below). A full discussion of the reliability and rigour of these methods occurs in the Discussion at Chapter 7. The strategy to link each stage of the sequential exploratory design (known as mixing) is a connected strategy. This means that the analysis of the qualitative stage determines the data collection plans of the following two projects (Creswell, 2009: 208). The research questions are listed below:

1. What modes of interaction are most effective in supporting leadership emergence, in the form of prestige?
2. What modes of interaction are most likely to improve team performance?
3. How do effective modes of interaction actually lead to better teamwork?
4. How do ineffective modes of interaction lead to resistance?

Project	Research question	Data theory	Approach
1: Interact Focus Group (IFG)	1, 2, 3, 4	Grounded Theory, Focus groups	Qualitative
2: Social Network Analysis Project (SNAP)	1, 2	SNA, Logistic regression	Quantitative
3: Information Pathways Project (IPP)	1, 2, 3	SNA, Logistic regression	Quantitative
4* Computer simulation	1,2,3,4	Computer simulation	Quantitative

Table 3.1: Thesis methodology

## Chapter 4

# Interact Focus Groups (IFG)

*Lof-dædum sceal in mægþa gehwære man geþēon*

Behaviour that is admired is the path to power among people everywhere  
Beowulf(Heaney, 2000: 2)

### Overview

*This project was designed to explore the modes and dynamics of leader-follower interactions. Using a post-heroic approach, I did not assume that leaders' individual differences solely explain leadership outcomes such as team performance. I set out instead to understand how followers perceive their interactions with leaders and how prestige shapes these encounters. Conducting eight focus groups with Royal Navy sailors I used grounded theory to derive an original synthesis of existing leadership theory, namely engagement, disengagement and resistance. This fusion of leadership studies and anthropological theory is driven by leader prestige in advice and participation networks. The results and implications for future research, including the following two projects, are discussed.*

### 4.1 Prologue

This chapter describes the first of three projects designed to understand the forms of beneficial leadership-interaction. This results from the inclusion of the *interaction* competence in the selection criteria for Commanding Officers in warships in the RN (the CCF) (Navy, 2011a). This criterion, now called “*people skills*” (*Ibid.*), was originally formulated by RN Defence Fellow, Captain Mike Young (Young and Dulewicz, 2005, 2006, 2007, 2008, 2009). The RN provides a good case study into the role of competence frameworks in leadership selection and development but I have extended the analysis to incorporate trait-process theories of leadership (see Literature Review Chapter 2). This project aims to discover how beneficial leadership-interaction takes place using an exploratory investigation through the use of focus groups. The discoveries from Project 1 are important to the RN but also have a wider impact for leadership studies. Project 1 will be described in the following sections by reproducing a published article for the *Leadership and Organisational*

*Development Journal* (LODJ) (Offord et al., 2016). The article was written by myself in conjunction with my supervisors: Professor Roger Gill (Durham University Business School) and Doctor Jeremy Kendal (Durham University Department of Anthropology). Although the article describes the project comprehensively it is necessary to expand on some the data and findings and also to describe some findings not discussed in the article. These items will be covered in two separate sections after the article.

## 4.2 Project One: Journal Article (Offord et al., 2016)

# Leadership between decks: a synthesis and development of engagement and resistance theories of leadership based on evidence from practice in Royal Navy warships.

*Leadership and Organizational Development Journal* (2016) Vol. 37, Iss.2, pp. 289-304.

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## Introduction

Leadership as a process of social interaction is in need of further research (Karp, 2013). Despite the development of follower-centric theories the banal interactions between leader and follower (and their importance) are poorly understood (Larsson and Lundholm, 2010). This research aims to contribute to a greater understanding of leadership interaction. We investigate the role of interaction in leadership effectiveness. Leadership interaction is an increasingly popular paradigm and focuses on multi-directional relations rather than the actions of single leaders (Gill, 2011; Meindl, 1995).

Interaction is invariably a focus of leadership development programmes. The Royal Navy Command Competence Framework (CCF) includes it as a competency (Tate, 2009; Royal Navy, 2010). Personal experience of the first author serving in a Mine Counter-Measures Vessel (MCMV), operating off the coast of Iraq (during the invasion of 2003), showed how a ship-borne team could achieve superior performance through interrelating. But what is the nature of this interaction? Our study adds to an understanding of leader-follower interaction, drawing on evidence from practice in Royal Navy (RN) warships.

In the next section we introduce the RN method of selecting commanding officers, the criterion of interaction and explain the RN competency approach. The following section discusses how traits and competencies can be used in a process-based view of leadership. Modes of interaction (leadership styles) are discussed next, linking to engagement and resistance theories. These theories were reviewed after analysing the transcripts inductively. The results of this analysis suggested a review of literature pertaining to engagement and resistance. The last two sections of the Introduction describe the naval context and the contribution we make to leadership theory and practice.

## Interaction as a competence in the Royal Navy.

The RN regards the command of warships (known as “sea command”) as having special significance. In the words of Rear Admiral Montgomery (Chief of Staff for Naval Personnel in 2009):

Of all the promotion and selection processes for which I am responsible, those that select people for sea command are - rank for rank - the ones which have the most direct bearing on the Royal Navy’s operational effectiveness.

(Tate, 2009)

The CCF was introduced in 2009 to ensure the best candidates were selected for sea command (Tate, 2009). This is based on Young and Dulewicz’s framework of competencies, which is now integrated into Command, Leadership and Management (CLM) development across the RN (Young and Dulewicz, 2005, 2008, 2009). Their research used a sample of personnel on leadership courses. Appraisal reports were compared with competencies based on leadership and personality questionnaires (Young and Dulewicz, 2005). Their survey of 271 individuals (with a 97 percent response rate) suggested four clusters of competencies.

This framework was then developed into criteria for sea command (Tate, 2009), using Young and Dulewicz’s work *op.cit.* A further review of the literature and interviews with 14 senior officers added a fifth cluster: warfare skills (Tate, 2009; Navy, 2011a).

The competency clusters which constitute the CCF are:

1. Conceptualise
2. Align
3. Interact
4. Create success
5. Warfare skills

Of these competency clusters, *interact* was the most highly correlated one with overall performance (Young and Dulewicz, 2009).

## Leadership as a dynamic process

### Traits and competencies

Leadership traits are characteristics shown by successful leaders. They are generally psychological in nature (Antonakis et al., 2012; Colbert et al., 2012). Boyatzis (2008) views traits as embedded in personality, whereas competencies are behavioural skills, influenced partly by traits. Antonakis et al. (2012) state that traits, as individual differences, are regaining popularity in leadership research. We consider competencies, specifically *interact* rather than traits per se. The competency approach focuses on behaviour which predicts superior leadership:

When traits are requirements for doing something, they are called “competencies”. Traits of leadership are competencies. They are needed if someone is to emerge, succeed or be effective as leader.

(Bass and Bass, 2008: 106)

And, as Zaccaro (2007) states, traits of leadership should not be confined to personality but include motives, values, social and cognitive ability, and knowledge.



## Leadership emergence

The theory above implicates a causal chain of events through which leadership emerges from traits and competencies through interaction (e.g. Antonakis et al. (2012); Colbert et al. (2012); Zaccaro (2012, 2007); Mehra, Dixon, Brass and Robertson (2006); Lord et al. (2001)). Having established event-level analysis of interaction as a promising method of inquiry, we turn to the question of what events to study. Dinh and Lord (2012) suggested the use of *jarring* events which evoke vivid, high-context memories. Larsson and Lundholm (2010) suggest, contrariwise, the study of everyday events for leadership research. As the authors state “ leadership is better seen as occurring in the midst of management.” This dichotomy arises from our perception of leadership as a grandiose or transformational concept and how we perceive management as the correct repository for *everyday* things Larsson and Lundholm (2010).

The RN provides both *jarring* and mundane events aplenty. Through intensive training and, operations RN personnel are subjected to intensive, significant and traumatic events. But most of the time sailors are engaged in everyday activities. The RN context is fortuitous as sailors appear to greatly enjoy sharing sea stories of just the kind referred to by (Dinh and Lord, 2012). This activity is known fondly as “spinning dits”, a well-known pastime in the RN. This activity is a part of the *glue* which holds RN life together (St George, 2012: 21). It is rich in context, episodic and laden with social information. Capturing information from “dit-spinning” is one way that events can be recorded and deciphered. Such a notion underlies our research, which aims to analyse events of jarring and mundane features of naval life.

## Leadership styles

Modes of interaction are also styles of leadership. Leadership style theories emerged in the 1950s and 1960s following dissatisfaction with the trait-based theories (Gill, 2011: 71). Seminal studies established styles which were viewed as task or people oriented (the Michigan studies) or as ‘structuring’ or ‘consideration’ (the Ohio State studies) (*Ibid.*:71).

Styles approaches have lessened in importance in academic research although their practical applications make them important in leadership development. For example, Action Centred Leadership (ACL) remains at the core of leadership training in the RN and is based broadly on task/people approaches to team leadership (Gill, 2011: 74). Leadership styles have lost traction within academia because they fail to account for situational aspects of leadership, do not include the role of values and have failed to sufficiently establish a link between different styles and team performance. However it is clear that followers prefer people oriented styles of leadership (*Ibid.*:72). Kahn’s engagement theory (Kahn, 1990) claims that concern for people (in interactions) is an antecedent for engagement and team performance.

## Engagement and resistance

Kahn (1990) conducted two qualitative studies of the psychological conditions for effective leadership in the work place. While describing these conditions he outlined a dynamic system of engagement and disengagement. Kahn (1990) described engagement as the “harnessing of personal selves”. (Gill,

2011: 257) describes engagement as:

The extent to which people in an organization will willingly, even eagerly, give of their discretionary effort, over and above doing what they have to do.

Disengagement is described by Kahn (1990) as the “uncoupling” of the three personal resources (cognitive, emotional and physical). It is the withdrawal or withholding of personal investment in a task.

Vogelgesang et al. (2013) describe engaged employees as an asset because they work harder and perform better. Disengaged employees, on the other hand, are a drag on performance, morale and resources. Khan, and more recent researchers, point out the lack of research into the processes of engagement and disengagement (Kahn, 1990; Rich et al., 2010; Xu and Thomas, 2011). Kahn (1990) claimed that task oriented leadership behaviours lead to disengagement. Excessively task-oriented behaviours also trigger resistance to leadership (Rodrigues and Collinson, 1995). Resistance to leadership still features rarely in leadership research (Collinson, 2012, 2006). Mainstream leadership theory lacks a coherent and comprehensive explanation of resistance to leadership in practice, treating it as abnormal and irrational (Collinson, 2005).

The causes of resistance appear to be the variation between followers’ and leaders’ situational perceptions (Collinson, 2012, 2006, 2005, 2002; Rodrigues and Collinson, 1995). Lukes’ controversial theory of power also suggests a continual desire for autonomy (Bradshaw, 1976; Benton, 1981). And Foucault (1979) points out that resistance is always found in the presence of power (Collinson, 2005).

## **Extending the theoretical framework**

Antonakis et al. (2012) describe a model of the leadership process, from traits to outcomes. Their research suggests a greater understanding of the interaction stage is the logical next step. We aim to extend the theoretical framework described in our review above and to understand the end-process better. We use an inductive method as this may be used not only to derive new theory but also to build on and synthesise established theory (Bazeley, 2007).

This article describes processes from previous research such as engagement theory (Kahn, 1990) and resistance to leadership (e.g. Collinson (2012)). We take the novel steps of combining these theories and developing resistance with levelling theories from anthropology (e.g. Boehm (2001)). This synthesis extends the framework of trait-process theories by embodying the dynamics of leader/follower interaction. It was only after coding our data that the emerging patterns suggested this combination of existing theories.

## **The naval context**

We investigated a sub-section of the RN: Mine-Countermeasures Vessels (MCMVs). These small ships, often called mine-hunters, enter minefields to render safe enemy munitions and allow the safe passage of other vessels. The task is dangerous and carried out in demanding conditions. The teams

on board are small and close-knit. A number of professions are represented, from mine-clearance divers and mine specialists to technicians and chefs. All are interdependent for success and safety. Three rank classes exist: officers, senior rates and junior rates.

To harness the richness of the sailors' stories (dits), we used a qualitative approach. Rather than ask about specific events, we knew from experience that our participants would be eager to share stories which hinged on socially significant (mundane and jarring) events. We did not code specific forms of interaction indicated in the CCF, preferring to ground our theory of interaction in the data. The method chosen to do this was focus groups.

## Methodology

### Focus groups

Focus groups collect data by convening people in a group, asking questions and listening to what they say (and how they say it), thereby gathering information relevant to a topic (Krueger and Casey, 2009: 2). (Bryman and Bell, 2011: 13-14) point out that focus groups can support an inductive approach. Grounded methods develop theory out of data using recursive techniques (*Ibid.*:576). As a qualitative approach, focus groups are an effective channel for grounded techniques(Kitzinger, 1994), although they have not always featured prominently in management research(Partington, 2000). This would appear to be due to the difficulties inherent in adopting the rigours of a truly grounded approach (*Ibid.*; (Bryman and Bell, 2011: 577).

A grounded approach is appealing for this research in offering the opportunity to assess leadership interaction from the viewpoint of the sailors themselves. Previous leadership research within the RN has been positivistic and deductive. For example, Young and Dulewicz (2005, 2008, 2009) used subjects' appraisal reports to correlate leadership traits with performance on career-leadership courses. Our contextual view offers an alternative and complementary strategy to such research.

### Data collection

Non-commissioned personnel (collectively called ratings) participated in groups called Interact Focus Groups (IFGs) to discuss leadership interaction. These individuals were serving on mine-hunters based in Faslane, the RN's nuclear-submarine base in Scotland. These vessels (and some of the participants) had seen action in Iraq (2003) and in Libya (2010). Forty-seven RN personnel participated, consisting of two cadres: Junior Rates and Senior Rates. Their average age was 32 (Junior Rates: 31; Senior Rates: 37) and they were overwhelmingly male (a fair representation of the situation at sea). Participants were split among focus groups such that five groups (IFG 1-5) constituted the junior level and three groups (IFG S1-S3) the senior level.

Eight focus groups were conducted using a maximum group size of eight, following the advice of (Bryman and Bell, 2011: 508) (see also Morgan (1996)). MCMVs were used as these offered convenient access. These individuals were of equivalent status and known to one another. The benefits of using pre-existing groups are ease of recruitment, a relaxed environment and the use of

shared stories (Bryman and Bell, 2011; Munday, 2006).

A questioning route was devised (Krueger and Casey, 2009: 38) with complementary moderation techniques. The aim of the questions was firstly to establish the importance of interaction. If the groups believed interaction to be important it was intended to discover the nature of this interaction. Discussions were audio-recorded, downloaded and imported into NVivo 8 (and later NVivo 10). The combined transcripts of the focus groups comprised 70,000 words.

## **Analysis**

### **Coding**

A system of codes was adopted following the protocol of grounded theory dictated by Corbin and Strauss (1990). Text in the transcripts was coded using open, axial and selective coding (Bryman and Bell, 2011: 578). Text was split into themes (open codes), which were organized in similar clusters (axial codes). These codes were placed under a central theme called the core category (Bryman and Bell, 2011; Bazeley, 2007).

### **Our approach to grounded theory**

As well as the coding technique other grounded techniques were included in our methodology. As themes emerged they suggested future data-collection opportunities in a process called recursive application (Bryman and Bell, 2011: 576). As the questioning route was altered to account for new themes it was imperative to maintain consistency with research aims throughout.

We also searched for coding overlaps or intersections and clustering of codes (see (Bazeley, 2007: 182-192)). Finally, the recursive application of new themes to earlier transcripts was applied; this is known as constant comparison (*Ibid.*:576). In practice this means coding and re-coding transcripts to ensure all themes are captured.

Theoretical saturation was deemed to have occurred when no new themes emerged during the discussions (*Ibid.*:442), typically lasting 45 minutes. Most focus-group projects consist of four to six discussions, by which point saturation has usually occurred (Morgan, 1996). Table 4.1 (below) shows the process used to analyse the transcript following the guidelines outlined in Bazeley (2007). This process was adhered to so as to ensure the principles of constant comparison and recursive applications.

The following sections break down interaction into two leader behaviours and three follower responses.

Phase/Operation	Stage	Description	Reference (Bazeley 2007)
Field Notes	Completion of Focus Group	Memo created to capture initial thoughts after Focus Group, noting dominant themes for detecting saturation. This was transferred to a Document Memo in NVivo once transcript typed.	p.62
Annotation	Completion of typing transcript	Notes made on specific occurrences	p.63
Comparison one	Completion of all transcripts	Open coding	p. 66-80
Comparison two	Completion of comparison one	Open coding, re-examining earlier transcripts in the light of recently added nodes	p. 66-80
Comparison three	Completion of comparison two	Axial coding	p. 100-120
Pit Stop	Completion of Comparison three	Holistic analysis and appraisal of overall analytical structure	p.155
Comparison four	Completion of Pit Stop	Selective coding	p.191

Table 4.1: Coding process for Interact Focus Groups

## Leader behaviours

### Engaging Leadership

In all focus groups, there was a determined assertion that good interaction leads to improved performance. A sailor in the first group makes the point:

I think that was down to him and his leadership because you never felt like you worked *for* him; you felt like you worked *with* him. And that was as a baby stoker [junior marine engineering mechanic] you felt like that. (IFG 1)

### Disengaging Leadership

The participants emphatically described some leader behaviour as detrimental to group performance. For example, during IFG 3 the sailors discussed the impact of being “kept in the dark”:

Sailor 1: “You wouldn’t mind, like, the changes in the Ship’s programme... not a thing that bothers me. It’s just that we never get told, ever”  
Moderator: “OK”

Sailor 2: “Well, it does change last minute”

Moderator: “How does it affect you?”

Sailor 2: “Straight away it affects you. If you’ve got something planned in ....if you hear the lads are dripping [complaining] ... Obviously yeah... the heads do drop”  
(IFG 3)

## **Follower responses**

### **Engagement**

Generally groups held that greater application or effort was a likely consequence of better leadership. An example is given below:

Senior Rate 1: “The officer we’re speaking about... his predecessor had a totally different leadership style; he wouldn’t just send an e-mail, he would come down and he would be very polite, saying ‘Would you mind? Do you mind?’ ”

Senior Rate 2: [Interrupts...] [Laughter]

Senior Rate 1: “... and he would achieve so much. I had so much respect for him and he made such a difference”

Moderator: “Do you think he got more out of his team that way”

Senior Rate 1: “Oh, 100 percent. And he went on draft [posted away] and everyone’s, like, ‘Oh, [...]’ ”

IFG S2

The Senior Rate in the discussion above suggests that an Officer he admired was capable of inducing not only a greater level of effort but also an emotional commitment among his team. We termed this phenomenon engagement.

### **Disengagement**

As might be expected, disengagement was another response to some leader behaviours (i.e. disengaging leadership). In the example below, a senior rate discusses the effect of a captain who did not interact well with the crew:

Senior Rate 1: “mmmm....it sort of isolated him from the crew in a negative way, you know. ‘Oh, it’s the old man [captain]’, whereas you get others where their door is always open. You’ll see them on 2 Deck and you won’t think ‘Oh, God! It’s the CO [Commanding Officer].’ He’s down there, just touring the estate”

IFG S3

### **Levelling**

Participants also discussed a third response which was used less often: that of resistance. Again we found extant theory (in both leadership studies and anthropology) which explained this behaviour. Resistance to leadership is a plausible third option for followers with respect to leader behaviours.

The RN provides an ideal context for research into resistance to leadership especially because overt defiance is strictly dealt with. If covert resistance can be used in a military context, it most certainly can be used in other contexts.

Theories of resistance to leadership offer a single motivation for resistance: unrealistic leadership goals. Our findings include resistance to realistic goals where leadership methods are not appropriate. ‘Barking’ orders was one area which generated resistance even though those orders may be rational. Resistance theories do not account for subtle methods of resistance such as gossip. The work of (Rodrigues and Collinson, 1995) is, exceptionally, an example of subtle resistance through the use of humour.

In anthropology resistance generates much more interest than appears in leadership studies. In traditional societies, egalitarianism has been maintained through the rigorous suppression of assertiveness in individuals, especially in would-be leaders. Such studies are not necessarily generalisable and may not interest leadership scholars directly. However most anthropologists agree that hierarchical leadership is a recent development in human history (Eerkens et al., 2009). Cross-cultural experiments on punishment conducted by Henrich (2006) showed that egalitarian behaviour remains a part of the human psyche.

Christopher Boehm, a primatologist, has organized his observations of human society into a theory of resistance to leadership called Reverse Dominance Hierarchies (RDH) (Boehm, 1993, 2001). He asserts that potential leaders are actively suppressed, or dominated, by the majority. Boehm suggests that humans are ambivalent towards leadership and seek to contain leaders through a process of social levelling (*Ibid.*).

We are interested in how this antagonism plays out in mundane interactions. In the following example, a sailor describes how poor information flow was dealt with by essentially antagonizing the Officer concerned until the Captain intervened. The Captain inadvertently created an opportunity to openly criticize the offending Officer without risking repercussions:

I was on a ship where, erm, the Daily Orders, the routine was changing throughout the day. And people kept going up and asking the XO [Executive Officer], erm, “You know what sort of routine the Ship should be working?” and things like that. The XO then went to the Captain; he was complaining because everybody kept going up and asking him. The Captain came by in the end and he says “Well, you know the XO’s getting bother and that.” Well, “To be honest, sir, it’s the XO’s job to run the Ship’s routine. So the reason people are going on at him is because no-one knows what’s going on. If everyone knew and the Ship’s routine was going via Daily Orders there would be no need ask to him every minute of the day!” Sailor 3 IFG 1

It is widely believed that assertive individuals are suppressed using a system of social levelling (Eerkens et al., 2009: 7). Social levelling tactics include gossip, ridicule, physical punishment and social isolation (Freid, 1967 cited in Eerkens (2009) (*Ibid.*). Most of these tactics (gossip, ridicule and social isolation) were openly discussed by the sailors as methods of dealing with unpopular leaders. By these means power differentials are minimised. Boehm’s well-known book *Hierarchy in*

the Forest asserts that levelling is a universal human trait (Boehm, 2001). Evolutionary Leadership Theory (ELT) (Van Vugt and Ahuja, 2010: 3) (King et al., 2009) also deploys levelling theory to describe leadership dynamics.

Social levelling provides an explanation for the assertion that power generates resistance. It also creates a fine-grained explanation of resistance in action through the use of humour (e.g. Rodrigues and Collinson (1995); Van Vugt and Ahuja (2010)), gossip and ostracism (e.g. Boehm (2001)). The notion of levelling allows a flexible system of interaction between leaders and followers which minimises the risk of actual opposition and conflict.

The full interaction model is presented in Figure 7.2 (below). This figure includes all codes which were used in the transcripts. Interaction takes the form of engaging or disengaging leadership, regardless of leadership style. Responses take the form of engagement, disengagement or levelling

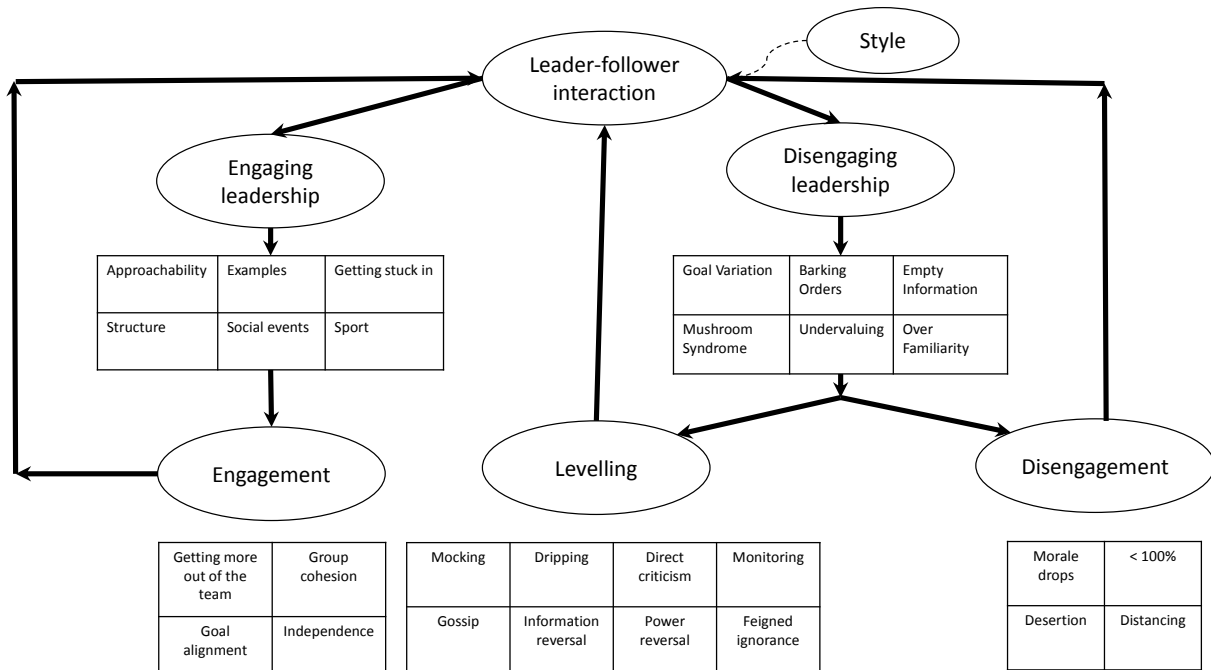


Figure 4.1: Leadership interaction model from Project 1.

The model demonstrates the range of possible behaviours and responses discussed in the focus groups. The core category is shown at the top, with direct links to leader behaviour and from this to follower response. The nature of these interactions is shown through the open codes inside the boxes. Feedback from follower responses is shown with a dotted line. The importance of style is relatively diminished as an associated factor.



## Discussion

Leadership interaction leads to a spectrum of responses ranging from engagement to resistance. These responses are due to the continual monitoring of leader behaviour by followers. Once a consensus is reached, followers may endorse or sanction leaders.

## Theoretical implications

Leadership studies remain highly fragmented despite a number of attempts to fuse theory fragments into a coherent whole (Gill, 2011: 100). And leadership research has been criticised for focussing solely on leader differences (Meindl, 1995). Leadership research also appears to have considered each theory one at a time. Rather than generate new theory fragments, we have fused engagement and resistance theory along with trait-process theories. This is not the first time a theoretical synthesis has been assembled. For example (Gill, 2011) discusses an integrative model of six core themes and practices, including engagement (p.100-106). Our focus, however, has been on a fine grained explanation of interaction, so we have moved from themes to processes.

To our knowledge this is the first time trait-process theories of leadership have been combined with a competency framework. We have extended one competency cluster in the Royal Navy's Command Competency Framework to explain the interaction dynamics which result. (Casimir et al., 2014) describe the area between the leader-follower relationship and follower performance as a *black box*. The engagement-disengagement-levelling responses we found provide at least some description of the contents of the *box*.

Trait-process approaches to leadership have justified the need to understand the processes which bridge individual differences in leaders and team output. They have also prescribed the means by which to do so Antonakis et al. (2012); Zaccaro (2007); Dinh and Lord (2012). Little research in this area actually specifies a model which explains the dynamics of trait-processes (for an exception see (DeRue et al., 2011)). While this research is exploratory and requires further work, the two drivers (engaging and disengaging leadership) explain the expression of the leadership competence *interaction*. These two modes comprise a number of elements shown at figure 7.2 (above). The three response modes (engagement, disengagement and levelling) complete a sketch of interaction in the leadership/followership process.

We accept that more research is required as to how these modes are triggered in different contexts. A criticism may be levelled that studies such as DeRue et al. (2011) have established such a model empirically. Their study outlines a model of trait-process but does not map specific traits with specific outcomes. Although the research reported in this article is qualitative, it achieves greater clarity in terms of which leader behaviours result in which follower behaviours.

Similarly we have connected engagement theory to leader differences. Engagement theory has been somewhat disembodied, although antecedents of engagement have been discussed (Kahn, 1990; Xu and Thomas, 2011). These antecedents involve interaction, placing engagement centrally in the interaction leadership model. The context for engagement described by Kahn (1990) is *thematic*, whereas we have identified the processes which drive engagement or disengagement.

Theories of resistance to leadership have been an impoverished area of leadership research (Collinson, 2012). Combining resistance with engagement theory re-frames resistance as one of the likely responses to leadership interaction. Boehm (1993, 2001) suggests there is a universal ambivalence to leadership. We feel this provides a more plausible scenario for resistance than simply goal variation (Collinson, 2012), which explains only some of the levelling responses from the focus group discussions. Resistance theory tends to discuss overt action (e.g. Collinson (2012, 2006, 2005, 2002)), whereas levelling theory covers a wider range of responses, many of which are subtle and continuous (e.g. Boehm (1993, 2001); Van Vugt and Ahuja (2010)). Both theories combine to create a comprehensive range of resistance behaviours, but levelling theory describes accurately the responses openly admitted in our focus groups.

Leadership within small professional teams in inhospitable environments is an increasingly attractive area for research. Levelling behaviours may be triggered by proximity, and this may plausibly explain their presence in anthropological sources, especially those studying small egalitarian groups. Some of the modes of engaging leadership, such as participation in sports, may also have a levelling dimension (playing sports usually relies on relinquishing rank while playing). This model could therefore be studied in similar contexts such as other small tightly knit professional teams.

## **Managerial implications**

Interaction as a competence (Young and Dulewicz, 2005, 2008, 2009) was strongly supported by our focus groups. In practice selection processes would benefit from inclusion of an interaction competence for leaders. A culture where interaction can thrive is likely to result in, and sustain, engagement in a workforce.

Leaders in all workplaces would benefit from an awareness of the subtle levelling activity which occurs universally. Activities as innocuous as gossip may be a reflection of existing poor interaction quality. And they may develop into entrenched resistance long before they become evident and overt.

The RN's use of the interact competence for the selection of commanding officers for warships is supported by our research. The sailors unanimously stated that interaction improves team performance. The reader may feel this is self-evident, but the RN has command and control styles of leadership at its disposal. It is entirely feasible that teams are directed with minimal interaction. Other contexts may be similar, e.g. military, policing, emergency services or other highly disciplined professions. Our research indicates that command and control styles of leadership do not capitalise on the opportunity for engagement.

## **Limitations of the research**

Qualitative research is often criticised for its lack of generalisability (Bryman and Bell, 2011: 398). Although this research may equally apply to any close knit professional team, many of the specific behaviours may vary. We have therefore described the over-arching principles of engagement, disengagement and levelling as responses in leader-follower interaction. These broader processes we

believe to be widespread, although at present we cannot justify this empirically. This limitation means that researchers must conduct their own exploratory research to understand the context of their own research areas, prior to delving into the dynamics described here. Finally, while we found that the sailors were extremely honest and, especially in groups, content to discuss the negative and positive aspects of their leadership experiences, in other contexts employees may be rather more circumspect or political in their responses to questions.

## 4.3 Further discussion

The aim of this section is to develop further analysis and discussion of Project 1 without duplicating any of the discussion in the proceeding section. Although we describe the relevant research questions, data and focal theory in our article (Offord et al., 2016), we did not cover all of the findings from Project 1. The need for brevity and to focus on specific focal theory made it necessary to omit some details. The process of engagement, disengagement and levelling goes some way to outline the dynamics of leadership interaction. Thus it describes the core elements of an interaction process which were investigated in greater detail in Projects 2 and 3. However, to complete the analysis of the data and to explain important aspects of the survey design used in the later projects, I will explain two modes of interaction discovered during Project 1. The modes of interaction described by the focus group participants were advice networks and participation networks. These will be described later in this section.

Transcripts of the eight focus groups can be found at Appendix A. I have retained the first names and nicknames used in the focus groups. Given the widespread use of nicknames in the RN, it is impossible to identify the participants from the transcripts. A full ethical clearance for the work was granted by the MOD Research Ethics Committee (MODREC) and the clearance letter can be found at Appendix E. It should also be noted that the transcripts include bad language.

### 4.3.1 Advice and participation

The leadership-interaction model shown at Figure 7.2 also shows elements of coding not discussed in our article (Offord et al., 2016). The large oval shapes represent *axial codes* (Bazeley, 2007: 111), that is behaviours which describe a number of related elements. These include leader behaviours: engaging and disengaging leadership as well as follower behaviour: engagement, disengagement and levelling. Axial coding formed the basis of our article. In order to discuss modes of interaction I will discuss the supporting behaviours, known as *open codes* (*Ibid.*). These leader and follower behaviours are shown in the boxes below the relevant oval. The modes of interaction were either advice or participation. Through these two modes leader prestige was assessed by followers. A description of the modes follows in this section.

All of the focus groups were clear that professional credibility was the most important aspect of their encounters with leaders. Many insisted that a leader's charisma was of secondary importance to having clear instructions from a credible leader. The following quote demonstrates how in dangerous situations, in particular, an assessment of leaders' credibility is paramount:

And like if you go back to Firex [Fire Exercise] and you're the person there and you're waiting to go in [into a burning compartment] and behind you is the Duty Senior Rate and you know him personally and you know he's good at what he does; and he's had experience, 15 years, then you are going to be more confident going in there if he's telling you to go in there. Whereas if you've got an artificer who's been in 6 years and he's like 'go in there, go in there' and he's got not no confidence with him and you're like, is he just getting me in there because I am the Attack BA [Breathing Apparatus] or the Initial Attack, do know what I mean? I think you really need to confident in whose

giving you that order.  
Sailor 1 (IFG2)

However, the overwhelming majority of participants also preferred an approachable leader. Only one individual expressed the opinion that he did not need informal interaction, simply formal orders. This particular discussion which took part in the first focus groups demonstrated the social hierarchy and policing of the group, whose members were roughly equal in rank terms. This individual was inexperienced and the more experienced members were quick to assert the group view over his and did so without equivocation:

**Sailor 1:** I'm new to the Ship to be honest; you know just getting to know my way along. I just like to be told what to do. [laughter].

**Moderator:** Just because you are finding your way around?

**Sailor1:** Yeah, I just like to be told what to do and get on with it. It doesn't really bother me.

**Moderator:** OK so you're not really bothered about people coming down and talking to you in the mess or in the galley or whatever, you just read Daily Orders, do it, happy?

**Sailor1:** Yeah, yeah yeah.

**Moderator:** OK. Anybody agree with that or...

**Sailor2:** Well...I mean he's only been in the Navy less than a year haven't you?

**Sailor1:** Yeah.

**Sailor2:** You will learn with experience.

**Sailor1:** Yes.

IFG1

This example of group dynamics demonstrates the power of credibility quite elegantly. Sailor 2's greater experience allowed him to quickly correct his junior colleague.

The example just quoted also demonstrates that approachability is important. In fact this factor is one of the most numerous open codes in the transcripts. Another frequent open code is *duty of care* which is mostly executed via the RN Divisional System. This system is an important means of discharging welfare, pastoral care and career advice. These factors were grouped together as forms of personal advice, which appears, from the transcripts, to be another important form of prestige. Professional and personal prestige takes the form of advice networks (i.e. prestigious leaders are seen as sources of advice). The list of open codes relating to engaging leadership demonstrates the extent to which professional and personal prestige has a role to play.

Approachability is the most commonly cited mode of engagement. This code applies equally to professional and personal advice and sums up the requirement for both forms of interaction. Many of the other open codes relate to various forms of professional credibility (*bearing, confidence, consistency, discipline, setting a good example and gaining understanding*). Some of these may reflect the peculiarly military bias towards outward signs of competence such as bearing, which incorporated fitness, smartness etc. People outside of the military may not agree that these aspects reflect professional credibility, but in the RN they generally do. The codes *structure is good* and *the value of routines* demonstrate a need on the part of followers for organisational norms. This, again,

may be perceived as peculiar to the RN but it is only the subtle detail which is linked to context. It reflects a need for the coordination of group activity through a specified hierarchy. While leaders draw authority position power from hierarchical position (French et al., 1959), their power is also limited to their organisational roles. From the point of view of these participants organisational norms are both comforting and reassuring:

Well, that is my role on board as a Leader [Leading Hand]. It's my job to motivate my lads, motivate my team. Officers and Senior Rates, they have different job and they'll step in, that's how it is, that's how it works. But the more information that comes down the line, not just to me but also the lads. Its not my job to be polite, its my job to tell them, get out of bed now, and we'll all get weekenders [weekend leave] as soon as we can.

Sailor 4 IFG 3

The credibility to enforce these norms is drawn largely from professional prestige. All the contextual open codes are likely to be different in other organisations; however, the link to professional prestige was considered to be generalisable to non-professional contexts by the focus groups.

The code *gaining understanding* is a more complex factor than the others: it reflects a leader's inclination to search for technical knowledge from subordinates. As leaders' knowledge in the technical world of the modern military becomes broader, leaders who show an interest in the more specialised skills of their team are esteemed. It generally implies a confidence in the leader to go out and ask when he or she does not know, and it shows an interest.

*Duty of care* is the only open node in the list which is explicitly about personal support to subordinates although approachability also demonstrates this aspect of leader behaviour. Some aspects such as *consistency* also have implications for personal interaction. *Honesty, management-by-walking-around(MBWA)*, *mutual support* and *people skills* were all linked to personal approachability. There was a dichotomy in what many participants said at the beginning and later in the focus groups. The majority claimed, at the beginning, that there was little, if any, requirement for informal interaction. Formal structures of command backed up by credibility were all that are required, it was claimed. However, all groups, later in the interview, specified views which were coded as described in this paragraph - that is more relaxed and informal modes of interaction. This demonstrates the need for personal approachability in addition to 'harder' forms of leadership.

Both forms of credibility (professional and personal) reflect respected and mostly experienced leaders who are both knowledgeable and approachable. These leaders are likely to be those whose credibility is already established through rank. That said, the participants universally expressed the view that this initial assessment is monitored and adapted according to the behaviour of the leader. This behaviour is reminiscent of the strategies expressed by Boehm (2001, 1993) and also Strategies To Overcome the Powerful (STOP) in ELT (Van Vugt and Ahuja, 2010: 95). In terms of professional and personal prestige, the participants often expressed a view that credible leaders were *listened to*, which is exactly how Henrich and Gil-White (2001) describe prestigious individuals in their anthropological account of how prestige affects the transmission of social information. The focus groups described credible leaders in much the same way; their information was to be trusted.

### 4.3.2 Participation networks: sports and social interaction

A different form of prestige was also expressed by the focus group participants: that of participation. This is summed up in the open code *getting stuck in*. In transcript coded under this heading participants expressed the view that leaders should get involved with activities on an equal footing to their teams. To use the naval context, the visibility of officers in “parts of ship” was seen to be important. This refers to work areas on the Ship such as the forecastle (fo’csle) and quarterdeck where much of the seamanship takes place. To see officers participating in and learning about the heavy work that takes place there was seen as a beneficial form of interaction. This also included activities such as “store ship”, a wholeship activity where stores are loaded from the jetty by forming a human chain down to the victualing stores. Again the benefit is in seeing leaders standing shoulder to shoulder with their subordinates. This theme is continued into *sports* and *social events*: another highly valued opportunity to interact on an equal footing with officers and senior rates.

While some of the context is RN specific, there is little doubt that the need to temporarily suspend hierarchical status is at the heart of these participation opportunities:

Yeah, as well as having to take orders off of people who are above you and if you are living with them constantly, which you are. It’s obviously good to spend time with them on a social level where its a kinda level playing field.  
Sailor 4 IFG5

Therefore participation has a wider impact than just the RN. Clearly followers benefit from these sorts of interactions. The suspension of rank is effectively self-levelling. Leaders who get this aspect wrong are subject to STOPS such as gossip:

**Sailor3:** Basically you’re sniping behind their back.

**Sailor1:** Yeah, basically. Talking behind their back with ...‘He told me to do this..’ and so on and so forth.[...]  
IFG 5

Self-levelling by participating in sport, for example, immunises leaders against levelling. By participating with subordinates leaders can ensure support in the professional arena. Unlike advice networks there does not appear to be ranking of prestige such that more experienced and approachable individuals are more prestigious than others. Participation criteria appear to be based on a threshold value such that a leader who is observed helping to scrub decks is considered to demonstrate his or her participation. Similarly, those who are good at sports do not accrue greater sports prestige than those who are not for the purposes of leadership assessment.

Participation prestige is therefore qualitatively different to advice prestige. It does not appear to be ranked and does not directly affect the quality of team performance by improving information transmission through the team. It performs a different purpose, which is to side-step the effects of levelling through self-levelling. It affects team performance by avoiding tactics such as desertion and isolation or even information sabotage techniques which were discussed openly in the focus groups (e.g. *information reversal*, *feigned ignorance*).

## 4.4 Further research

Project 1 highlighted a dynamic process whereby leaders are assessed by followers resulting in enhanced team performance through engagement or reduced performance because of disengagement or levelling. This provides a qualitative description of the proximal predictors of leadership outcomes required to move trait-process models forward (Antonakis et al., 2012; Casimir et al., 2014). Further research is required to quantify these findings.

It follows that there must be a study which quantifies leader prestige in both advice and participation. In terms of advice, prestige is confined to professional and personal interaction. Participation can, however, take many forms. The most cited and most emotive topics concerning participation are sports and social events. Measurement of the two advice and two participation prestige variables would allow an analysis of proximal predictors and leadership outcomes. With team performance as the dependent variable and prestige as the independent variable, the presence of a correlation between these factors could be explored.

Prestige values can be captured using Social Network Analysis (SNA). Therefore measurement of these variables would depend on the mapping of advice and participation networks. This chapter will not describe the data theory pertaining to SNA: this will be done in the next chapter which describes Project 2. The hypotheses for Project 2 are as follows:

1. H1: Leaders with high professional prestige will generate higher team performance.
2. H2: Leaders with high personal prestige will generate higher team performance.
3. H3: Leaders with high social prestige will generate higher team performance.
4. H4: Leaders with high sports prestige will generate higher team performance.
5. H5: Leaders with high prestige in *all* dimensions will generate higher team performance.



## Chapter 5

# Social Network Analysis Project (SNAP)

*Leaders and followers matter to each other, as do the quality of relations between them.*

(Bass and Bass, 2008: 400)

### Overview

*Chapter 4 (Interact Focus Groups) indicated that engagement through leadership interaction was enabled by the professional or personal credibility of the leaders. Another means of engaging followers was through participation in events which required leaders to interact on an equal footing to followers (i.e. playing sports or socialising). Participation networks allowed leaders to avoid resistance, via social levelling, while advice networks improved leader credibility in the eyes of followers. This project uses Social Network Analysis to map advice and participation networks and compare leader prestige with team performance. A logistic regression demonstrated that all of the networks had a significant positive effect on team performance. Professional prestige had the greatest effect size but leaders who demonstrated prestige in all of the tested dimensions had still greater effect on team performance. Implications for research and practice are discussed.*

### 5.1 Introduction

Chapter 4 suggested a leadership model in which beneficial encounters achieved engagement via two modes of interaction: advice and participation. The first mode implied credibility in the professional and personal fields as well as approachability for advice. The second mode entailed participation. This area was not strictly defined, the key criterion being the ability of a leader to participate on equal terms with his or her team temporarily. Although not limited to these two, the modes of participation most commonly referred to were sports and social interaction. These two dimensions both implicated an ability to interact as equals with colleagues. This requires a willingness on the leader's part to level himself or herself with followers. Developing anthropological concepts of levelling (see Chapter 2), I have termed this "self-levelling" and I hypothesise that this activity avoids levelling behaviour from the *followers*. Figure 5.1(below) illustrates the modes and dimensions of

leadership interaction.

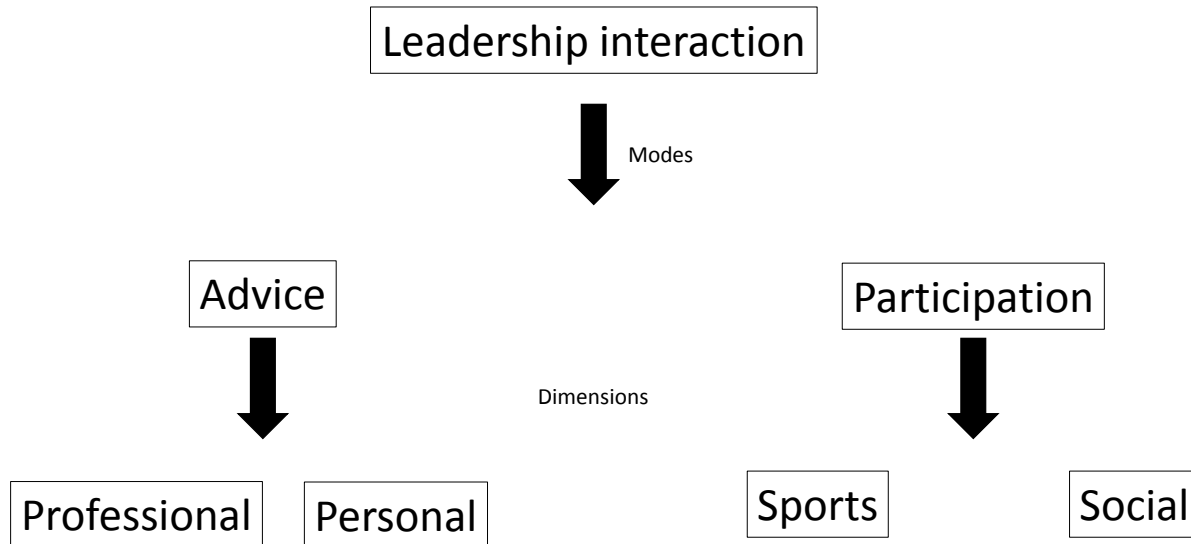


Figure 5.1: Modes and dimensions of leadership interaction.

*Project 1 described two modes of interaction: advice and participation. Advice networks operate in two dimensions: professional and personal. There are many dimensions of participation but sports and social interaction were discussed the most.*

The aim of this project is to investigate empirically the model developed in Project 1 (see Chapter 4). A diagram of the model is given at Figure 5.2

Project 1 attempted to answer the following research questions:

1. What modes of interaction are most effective in supporting leadership emergence, in the form of prestige?
2. What modes of interaction are most likely to improve team performance?
3. How do effective modes of interaction actually lead to better teamwork?
4. How do ineffective modes of interaction lead to resistance?

As described earlier, the first research question is answered in determining two modes (advice and participation), with four dimensions of interaction which support the development of prestige. Prestigious actors become leaders be they formally in charge or otherwise, although rank is clearly implicated in the development of prestige. Furthermore, these modes of interaction were claimed, by the focus group participants, to improve team performance. The third question generated considerable discussion of information and how prestigious leaders were credible sources. Finally the

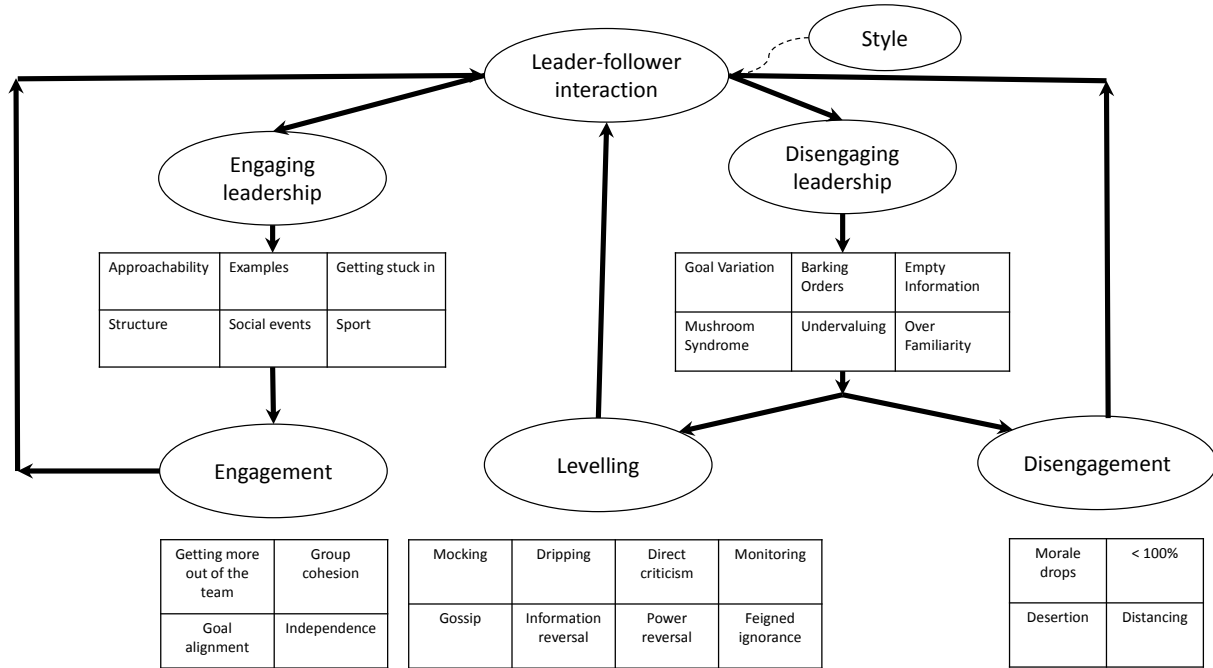


Figure 5.2: Leadership interaction model from Project 1.

Figure 5.2 demonstrates how interaction leads to engaging or disengaging leadership and the associated follower behaviour (engagement, disengagement and levelling). Boxes under each behaviour (ellipses) show the forms of that behaviour.

participants were very clear that disengaging leadership behaviours could lead to resistance or levelling. Sequential exploratory design requires that these qualitative results are used to shape the data collection priorities for the following quantitative research (Creswell, 2009: 208).

Leadership interaction results in engaging or disengaging leadership. Engaging leadership takes place via the four dimensions discussed earlier (although participation can also take place in other ways). Engaging leadership results in engagement which may lead to enhanced performance (Vogelgesang et al., 2013; Kahn, 1990). Disengaging leadership results in disengagement and resistance. This part of the model is difficult to measure. While participants may be willing to report positive behaviours in leaders, negative behaviours are less likely to be honestly reported. Admitting to disengagement and, to a greater extent, resistance is even less likely. However, self-levelling appears to be behaviour to preempt the use of levelling by followers. Therefore a measurement of the four dimensions would demonstrate not only engaging interaction but also a mechanism to prevent disengagement and resistance. These four dimensions were therefore selected to investigate the interaction model shown at Figure 5.2. These dimensions form five hypotheses which are tested in this chapter:

1. H1: Leaders with high professional prestige will generate higher team performance.
2. H2: Leaders with high personal prestige will generate higher team performance.

3. H3: Leaders with high social prestige will generate higher team performance.
4. H4: Leaders with high sports prestige will generate higher team performance.
5. H5: Leaders with high prestige in *all* dimensions will generate higher team performance.

It could be argued that the two participation modes of interaction (sports and social) do not constitute prestige as normally defined. After all, the focus group participants did not suggest that good sports persons, for instance, were more highly regarded. The types of participation suggested were not those that imparted some kind of kudos on leaders, simply joining in was considered more important. However, because the focus groups emphasised this mode of interaction in very similar terms to the advice networks, I have selected these modes of interaction to be tested as a form of prestige. It should be noted that this type of participation was discussed alongside other types of participation such as assisting with “store ship”, an activity known to enhance prestige and respect among sailors.

The hypotheses discussed earlier are posited to answer the first and second research questions by indicating which modes and dimensions of interaction from the leader-follower interaction model support leadership emergence and team performance. This allows the data collection priorities to connect with the findings of the first project as expected in sequential exploratory design (Creswell, 2009: 208).

## 5.2 Social Network Analysis

Social Network Analysis (SNA) was selected as the means to measure interaction along the dimensions specified. SNA is a fairly recent addition to the arsenal of leadership research techniques. It extends earlier work on Leader-Member Exchange (LMX) theories (Balkundi and Kilduff, 2005). Although SNA was first used for research in the early 20th Century its use for leadership studies was limited (*Ibid.*) LMX used SNA techniques to explore dyadic relationships between leaders and followers much later. The development of LMX to SNA appears to have occurred when LMX practitioners began to publish articles using full social networks (e.g. Sparrowe and Liden (2005); Sparrowe et al. (2001); Baldwin et al. (1997)). This development in leadership studies caused Balkundi and Kilduff (2005) to summarise earlier work and outline the benefits of SNA to leadership researchers.

A social network is a group of actors and their relational ties (Wasserman and Faust, 1994: 9). SNA was preceded by the innovation of sociometry, founded by Moreno in the early 1930’s (*Ibid.*:11). Moreno founded the sociogram as a method of visualizing group dynamics. The sociogram depicts persons in a group as nodes in two dimensional space connected by lines which represent relationships. An example of a sociogram is given at Figure 5.3. Each actor in a social network is represented by a node (also called a vertex). Nodes are connected by lines representing relational ties (also called edges or arcs).

Based on graph theory, SNA may be said to extend back to Leonard Euhler, who, in 1736, used a graph consisting of nodes connected by edges to solve a popular riddle concerning the seven bridges in Koningsberg. Euhler proved mathematically that no path existed which crossed all of the bridges exactly once (Newman et al., 2006: 1). Graph theory as a mathematical discipline still

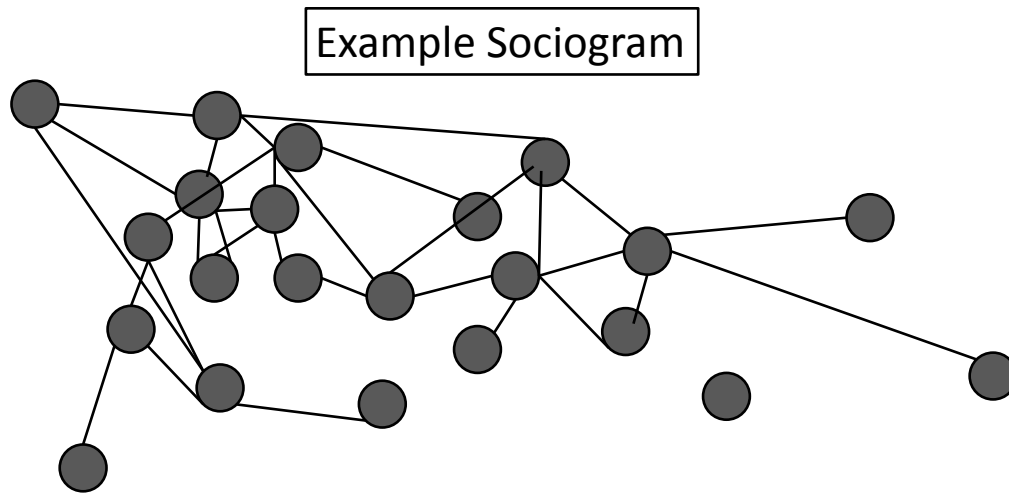


Figure 5.3: An example of a sociogram.

generates new topics of study, while social psychology has borrowed heavily from it to develop useful instruments in the study of group behaviour. I will necessarily focus on sociological uses of network analysis for my research of leadership and group behaviour.

Graph theory and matrix operations form the basis of SNA (Wasserman and Faust, 1994: 92). These techniques support concepts of centrality and prestige as well as a number of cohesion and structural measures within a group (*Ibid.*). Graphs provide the following features of value to social scientists:

1. A language for describing social structure
2. Ways of quantifying structural properties
3. Means to test hypotheses regarding social structure
4. A visual representation of social structures

Source: (Wasserman and Faust, 1994: 93)

Typically the information illustrated by sociograms can be stored in matrices (Wasserman and Faust, 1994: 150). Matrices contain the same information as graphs; however, matrices are also valuable for computation. SNA programmes such GRADAP, UCINET and STRUCTURE are based on matrices (Wasserman and Faust, 1994: 93). *Igraph*, a package which runs on the statistical programming language R, also uses graph and matrix theory for network analysis (Kolaczyk and Csárdi,

2014). R is rapidly becoming the accepted standard for statistical research and, as a programming language, it offers great flexibility (*Ibid.*:8).

Graph information is stored in matrix form called a sociomatrix (Wasserman and Faust, 1994: 150). This matrix is a square adjacency matrix where both rows and columns are a list of actors, nodes or vertices in a network. A relationship between actor  $i$  and actor  $j$  is recorded by a 1 in the cell which relates to both actors. If no relationship exists, a 0 is recorded in this cell. For a graph  $G = (V, E)$  this relationship (or the lack of) is defined so that

$$A_{ij} = \begin{cases} 1, & \text{if } (i, j) \in E \\ 0, & \text{otherwise} \end{cases} \quad (5.1)$$

where:

A = the matrix

V = the set of vertices

E = the set of edges

*A is non-zero for entries whose row-column indices (i,j) correspond to vertices (from the set of vertices(V) in G joined by an edge (from the set of edges (E), from i to j, and zero for those that are not.*

(Kolaczyk and Csárdi, 2014: 17)

Sociograms vary in the level of description of network variables. In some graphs a relationship may simply exist (i.e. Actor A is friends with Actor B). This is a non-directional tie, since the symmetry of the relationship is unstated. Directed graphs give more detail since they state the relationship in both directions (i.e. Actor A is friends with Actor B who is also friends with Actor A). Additionally a value can be given to the tie (e.g. positive/negative or valued). These graphs are known as valued or signed graphs (Wasserman and Faust, 1994: 136). Although directed and undirected graphs are commonly used, the use of valued graphs is not as developed as it is for dichotomous graphs (Wasserman and Faust, 1994: 140).

Following Moreno's sociogram, the network approach was applied experimentally to group communication and performance research in the famous MIT studies (Bavelas, 1950; Leavitt, 1951). Among the considerations of the MIT studies was leadership emergence. Leaders were found to develop from specific nodes in specific structural forms (Freeman et al., 1980). The MIT studies developed the notion of centrality, a crucial component of SNA, but agreement over the meaning and function of centrality was elusive, leading to a decline in the use of the network approach over the sixties (*Ibid.*) An overview of the MIT experiments is given by (Freeman et al., 1980) who also recreate the MIT studies, asserting the importance of centrality and defining new aspects.

A full discussion of centrality is beyond the scope of this chapter. I will use the definition of actor centrality stated by (Wasserman and Faust, 1994) since this relates to individuals in the network rather than structural factors such as an actor's position in the network. This research is based on the notion of individual prestige rather than positional leverage. Actor centrality defines how *involved*

an actor is in a social network (*Ibid.*:173). This is defined in SNA by the number of ties transmitted and received by an actor. This is contrasted with prestige which is defined by the number of ties an actor *receives*. Otherwise the two notions are similar (*Ibid.*:174). From Chapter 4 I have stated an interest specifically in prestige since this best reflects the notion of credibility considered to be so important by the focus group participants. Prestige, as I have described in Chapter 2, also has meaning in anthropology and evolutionary approaches to leadership in describing how leadership is *earned*. Mathematically prestige is described below:

$$P'_D(n_i) = \frac{d(n_i)}{g - 1} \quad (5.2)$$

where:  $P'_D(n_i)$  = an actor level prestige index

$d(n_i)$  = indegree of actor ( $i$ )

$g$  = total number of possible ties

This equation is adapted from Wasserman and Faust (1994: 179). The authors use this equation to define Actor Degree Centrality. Degree is defined by the number of edges or ties associated with a vertex or node (*Ibid.*). I have adapted the equation by specifying in-degree (inward ties) and thus changing the equation to define prestige rather than centrality. Because the equation is standardised (by dividing by  $(g-1)$ ), the variable can be compared across groups of different sizes (*Ibid.*).

Studies of centrality in leadership include Brass (1984) and Brass et al. (1998), investigations of power and influence derived from a structural analysis of networks. Brass and Burkhardt (1993) conceive centrality as power potential. Balkundi et al. (2011) found leader centrality was positively correlated with perceived charisma, which also affected team performance.

Mehra, Dixon, Brass and Robertson (2006) also found a relationship between leader centrality and group performance. The correlation existed between leaders' centrality and group performance in both internal and external social networks. In other words, effective leaders had extensive ties within the group in question and with external peer networks. Similarly Sparrowe et al. (2001) and Bono and Anderson (2005) were able to correlate centrality in advice networks with team performance.

The role of prestigious persons as sources of valuable information has been researched by Parker et al. (2013); Hoppe and Reinelt (2010); Balkundi and Kilduff (2005). This approach tends towards an ego-centred view of networks, comparing individuals' networks rather than a leader's position within the network. Parker et al. (2013) discovered that academic discipline or research centre leadership is positively affected by large social networks.

Balkundi and Kilduff (2005), in their review of SNA in leadership studies, begin with leader cognition. They suggest that successful leaders are able to place themselves strategically within the network to achieve the best results. This does not account for leaders who do not possess this perception or are unable to manoeuvre in the social space in such a deterministic fashion. In other words the authors do not account for which leaders happen to occupy central positions within a network. A great deal of research supports the notion that leaders with high centrality (or prestige) are able to achieve better performance (Balkundi and Kilduff, 2005; Sparrowe and Liden, 2005; Sparrowe et al.,

2001; Baldwin et al., 1997), but this does not necessarily mean that leaders can place themselves so effectively. Furthermore, the review suggests that followers will also situate themselves near to leaders they consider to be influential (*Ibid.*). Again the self-determinacy demonstrated in this approach is difficult to substantiate in my research. The authors have concerned themselves in their examples, however, with powerful individuals such as CEOs and this may explain their assertions. They are not echoed in the findings of Project 1. The context here is of assigned leaders and their followers' perceptions of them. There is no suggestion that followers choose to move into alternative social space to achieve greater influence. Networks of choice appeared instead to revolve around respect and approachability. For these reasons I have chosen not to include cognitive approaches.

Alternatively, Sparrowe et al. (2001) depict centrality in terms of its effect on individual and group performance without recourse to arguments for social intelligence. This resonates with the findings of Project 1, that informal ties are the channel for information regarding social identity and norms (*Ibid.*, Sparrowe and Liden (2005)). This is highly relevant to hierarchical organisations where the formal structure is often considered to be comparatively stronger. Sparrowe et al. (2001) also consider the notion of resistance via "hindrance networks"; again this supports findings from Project 1 (see also Baldwin et al. (1997)). These authors also describe two SNA measures relevant to this study: density and centrality. Density is described as the mean number of ties within a group (Sparrowe et al., 2001: 317).

Density is a standardised measure of the number of ties in a network such that different networks can be compared. Density is given as:

$$\Delta = \frac{L}{g(g-1)} \quad (5.3)$$

where:

$\Delta$  = Density

L = number of ties

g = total number of possible ties

(Wasserman and Faust, 1994: 129)

As a normalised measure, density ranges between 0 and 1. Without normalising the measurement (by dividing by total available ties), the number of ties will vary with group size, so the result density measurement is not comparable between groups of different size. Density is an intuitive measure of cohesion but it can be subject to misuse (Parker et al., 2013). In fact, networks with vastly differing characteristics may exhibit the similar density measurements (*Ibid.*). Therefore density can be useful but must be used in conjunction with other network measures. This chapter will discuss the density of the teams under study in conjunction with prestige.

There are a large number of network metrics available for network analysts (see Wasserman and Faust (1994) for a full description). Many involve complex research into the structural dynamics of social groups. I have focussed on prestige as suggested by the findings in Chapter 4. As will be explained in the Methodology section, I do not use density measures to account for team performance.



SNA is an ideal means to to understand interaction between actors rather than the qualities that they possess (Balkundi and Kilduff, 2005). I have taken a process based view by beginning with a competence (interaction skills) and defining it in terms of actors' interactions. It is through these interactions that I predict superior performance. This approach places the research in a post-heroic paradigm through concentrating on relational factors. Embeddedness means that perceptions of leadership are expressed through relational ties (*Ibid.*). This also suggests that these perceptions are developed over time and prior to events where leadership is seen to be exerted, as asserted by Karp (2013); Larsson and Lundholm (2010). The utility of social ties is usually referred to in terms of social capital (Larsson and Lundholm, 2010). I suggest that prestige is a form of social capital allowing leaders to exert greater influence.

## 5.3 Methodology

### 5.3.1 Description of the data

The data were collected from eight Mine Counter Measures Vessels (MCMV). These small warships have a crew (called a "Ship's Company") of around 40. The Ship's Company are split into departments (e.g. Marine Engineering or Mine Warfare). For certain tasks, teams from across departments come together, for example Command and Control (C2) tasks use key players from across the departments. For sea training, I identified 12 teams for whom an assesment report would be written; their size varying from 3 to 40, each with an identifiable leader. These are listed in Table 5.1.

Team	Group size	Leader rank
Whole Ship	39-44	Lieutenant Commander (1)
Navigation	4-6	Lieutenant (2)
C2	7-8	Lieutenant Commander (1)
Marine Engineering (ME)	9	Warrant Officer (3)
Weapon Engineering (WE)	3	Chief Petty Officer (4)
Technical (ME and WE)	12	Warrant Officer (3)
Mine Warfare (MW)	10-12	Lieutenant (2)
Seamanship	10-12	Petty Officer (5)
Diving	6	Petty Officer (5)
Logistics	3	Leading Hand (6)
Communications	3	Leading Hand (6)
Medical	4	Petty Officer (5)

Table 5.1: Summary of departments assessed on sea training  
*The numbers in brackets after rank indicate level within overall Ship's Company where 1 indicates the highest rank*

The MCMVs which participated were undergoing Operational Sea Training (OST). This is a five week package of collective training for the whole Ship's Company. A critical feature of sea training

is its collective nature; teams not individuals are trained. Team training in the RN, as elsewhere, is considered an art rather than a science and is still developing in terms of philosophy and doctrine. Nevertheless, sea training is regulated through the use of the Operational Sea Training Guide (OST Guide). This manual codifies the assessment of team training along clear guidelines. During the five weeks these vessels were required to participate in a number of simulated events, commonly called "serials" but more easily recognised outside of the RN as exercises. These serials varied from first aid and fire-fighting to operational war-fighting demonstrations. The training is rigorous and demanding, placing the Ship's Company under a considerable amount of pressure. Each serial is assessed by a sea-rider, a subject matter expert in the relevant field. After assessment the Ship's Company are coached to develop their capability in the relevant field. Some serials require individuals or small teams, others require departmental effort or whole-ship participation. The whole package takes place in the vicinity of the River Clyde in Scotland.

The average age of the participants was 32.4 years. The Ships' Companies were predominately male with 12 percent female members. All eight MCMVs volunteered to participate fully so a 100 percent return of the data was achieved. The method of data collection was cleared by the MOD Research Ethics Committee (MODREC) (see Appendix E). The data were used to obtain prestige values for all participants and density values for all teams.

### 5.3.2 Data collection

Having obtained permission from Commander Sea Training (Commander Iain Cull OBE Royal Navy) to collect the data while ships were on OST, the vessels themselves were contacted via e-mail. In all ships the Commanding Officers were content to allow the survey. A questionnaire was designed following a pilot study on an MCMV (HMS Penzance) in late 2012. The questionnaire took the form of a spreadsheet. Four worksheets were included in the document, one for each interaction dimension articulated in Project One (professional, personal, sport and social). Each worksheet was headed by a single question. The four questions were:

1. Do you go to this person for professional advice?
2. Do you go to this person for personal advice?
3. Do you play sport with this person?
4. Do you socialise with this person?

Each work sheet contained a column containing each member of the Ship's Company and a row at the top containing the responses: never, rarely, sometimes and often. The participant simply placed an X in the correct category for each colleague. This process took one minute per dimension and four minutes in total. The short time it took to complete the questionnaire helped considerably in persuading individuals to take part. An example of the questionnaire is at Appendix B. Because the questionnaire uses names, an anonymised version is used as a guide.

I visited each ship at the beginning of their OST period, a point at which the Ship was often alongside, that is, secured to the jetty. Occasionally I went to sea with the vessel to collect the data

as the ship was receiving training. By visiting the ship personally and asking personnel to participate when they had sufficient time I was able to achieve 100 percent participation. I believe this would not have happened had I relied completely on e-mailed responses. The data were collected using a netbook but later a tablet was utilised. The tablet was lightweight and easy to pass around and therefore the better tool for data collection.

The total number of participants was 324. From these data the independent variables were extracted following the procedure noted in the data analysis section. The dependent variable was a measure of team performance based on sea-riders' assessment of team performance over 345 admissible serials. During 2013, a large number of serials were conducted (c.800). However, not all serials could be used to derive a team performance value. This was because some serials were conducted for individuals and others involved a group of unidentified individuals, for whom prestige values could not be assigned. Filtering the serial reports resulted in a sample of 345 events with reliable dependent and independent variables ( $N = 345$ ). As stated earlier, the OST Guide provides guidance to sea-riders as to how to assess team performance and arrive at an appropriate assessment category. The actual assessments were therefore compared to the guidance in the OST Guide to derive an internal reliability measurement using Cronberg's Alpha. Since sea-riders include a written narrative in their assessment, it was straightforward to compare their assessment with the guidance. The sea-riders' assessments; were shown to be extremely reliable ( $\alpha = 0.904$ ). The sea-riders' reports were typed narratives including an established assessment category. The categories were as listed below:

1. Unsatisfactory
2. Below Standard
3. Satisfactory
4. Very Satisfactory
5. Good
6. Very Good

Each team (i.e. engineering department, seamanship department etc.) completed a number of serials; a number of serials also involved multiple departments or the whole ship. The dependent variable was the out performance assessment for *each* serial, the independent variable being the prestige value for the leader of the relevant group. The reports also include a detailed written narrative. This narrative allowed me to isolate aspects of teamwork, identify team members and ascertain whether or not the serial required teamwork. For example, some serials involved individuals or mechanical operations. In some cases an assessment was affected by an equipment failure and therefore was out of the control of the team members. The output variable is a categorical measure; however, this was dichotomised to allow a logistic regression of the data. This is covered in more detail in the data analysis section. It should also be noted that it was necessary to define exactly who was in which team when considering each serial. In some cases, for instance a catering serial, only three persons were involved under a fairly junior leader. For other serials the whole ship was involved under the leadership of the Commanding Officer. In each case the leader was identified to

ensure the correct allocation of the dependent variable to the regression.

### 5.3.3 Data analysis

From the spreadsheets returned from the participants it was necessary to construct a square matrix amenable to SNA techniques. The first stage was to anonymise the data in accordance with the ethical procedure agreed by MODREC (see Appendix E). Names were replaced by codes which indicated status, and profession. The codes were therefore not completely random. However, I felt that inclusion of these data were necessary to allow explanation of cliques along professional and hierarchical lines. The Ship name and crew number were also replaced and, since the crews move from ship to ship periodically, I assess that it would be impossible to ascertain that “OFF1” on “Ship3”, for example, is actually Lieutenant Commander Smith. Once the data were anonymised SNA variables were extracted. These were actor prestige and team density.

The open source statistical programming language R was used to import the socio matrix. This was constructed from the questionnaires using Excel. The R analysis was assisted by the package *igraph* and I also wrote programmes to import the matrix data and to derive specific calculations. Igraph was used to calculate in-degree, that is the number of incoming ties received by an actor. The value was then normalised by dividing by the number of available ties (see Equation 5.2). The resulting prestige value was therefore between 0 and 1. Prestige statistics were calculated for all Ship’s Company members. Additionally a combined prestige variable was created by averaging the four prestige variables for each individual. The combined variable was intended to account for individuals’ prominence in *all* of the networks. Figure 5.4 shows a typical sociogram constructed from an MCMV.

The density variable (using R) was calculated for all of the teams onboard. In many cases the teams under scrutiny were very small. For example a catering team or a communications team may number only three or four personnel. Although the density calculation is standardised (see Equation 5.8), team size may still create problems. When considering the density of a small team one must account for the fact that the leader may contribute 33 or 25 percent of the ties used in the density calculation. As well as catering and communication exercises, however, there were whole ship activities involving 40-plus personnel. In these cases the leader’s contribution to density is much smaller. It should also be noted that density can also be seen as both quantitatively and qualitatively different from prestige as it measures both inward and outward ties. It is a generalised interaction measure, rather than a measure of individualised prestige. Nevertheless I considered this problem with the definition of the two variables to be of concern.

Because of the interaction between prestige and density, I calculated the density of each team but without counting the leader’s inward and outward ties. This variable was simply the normalised number of ties minus those supplied by the leader in each case. The new variable was labelled “D-L”. Both conventional density and D-L were calculated and used. Figure 5.5 depicts the variables described in diagrammatic form.

The dependent variable was obtained from sea-riders’ reports. As explained earlier, these included a categorical outcome. The dependent variable describes a group outcome since it is the

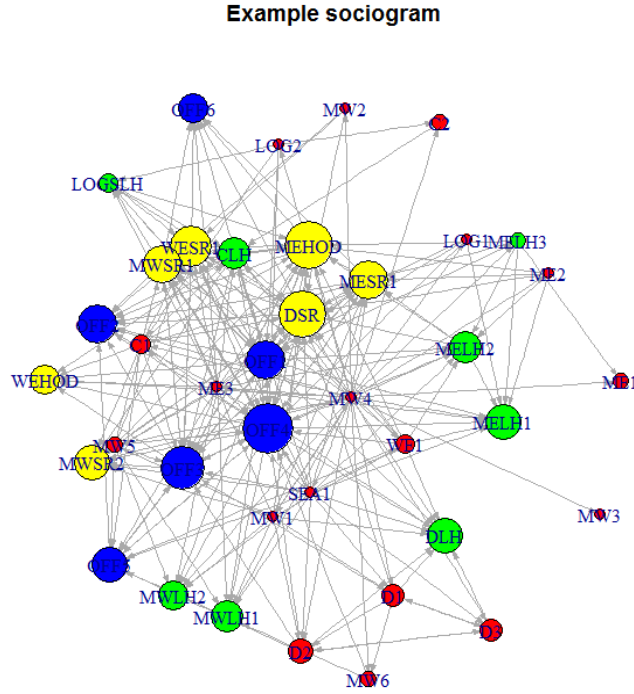


Figure 5.4: An example of a sociogram constructed for Project 2.

*The colours of the nodes indicate rank. From the highest to the lowest ranks the nodes are coloured: blue = officers; yellow = senior rates; green = leading hands; red = able rates. The size of the node is proportional to its prestige.*

sea-riders' assessment of a group's performance. For example, an assessment report of a communications task will apply only to the communications department personnel. In this example the group size is only three and the leader (for whom prestige is the independent variable) is a Leading Hand (only one rank higher than her subordinates). On the other hand, a whole-ship event such as a search and rescue mission is a large group of around 40 personnel lead by the Commanding Officer (a Lieutenant Commander). In all cases the outcome is at the group level. The independent variable is the result of dyadic ties but is also at the group level since it is the sum of all the dyadic ties. By considering prestige only within each group being assessed (by removing all other ties), I ensure that both the independent and dependent variables are at the group level and consider the same groups. However, some consideration of multi-level aspects is captured in the emergence of group prestige from dyadic ties.

An OLS regression proved to be inconclusive due to the fact that variables were not normally distributed but positively skewed. Most of the data fell between the Satisfactory and Very Satisfactory criteria. Employed as a sea-rider myself, I quickly learned that assessments outside of the Satisfactory-Very Satisfactory range were rare. At the top end of the categories, Good and Very Good assessments relied on very few team-work errors, a situation which is difficult to achieve due

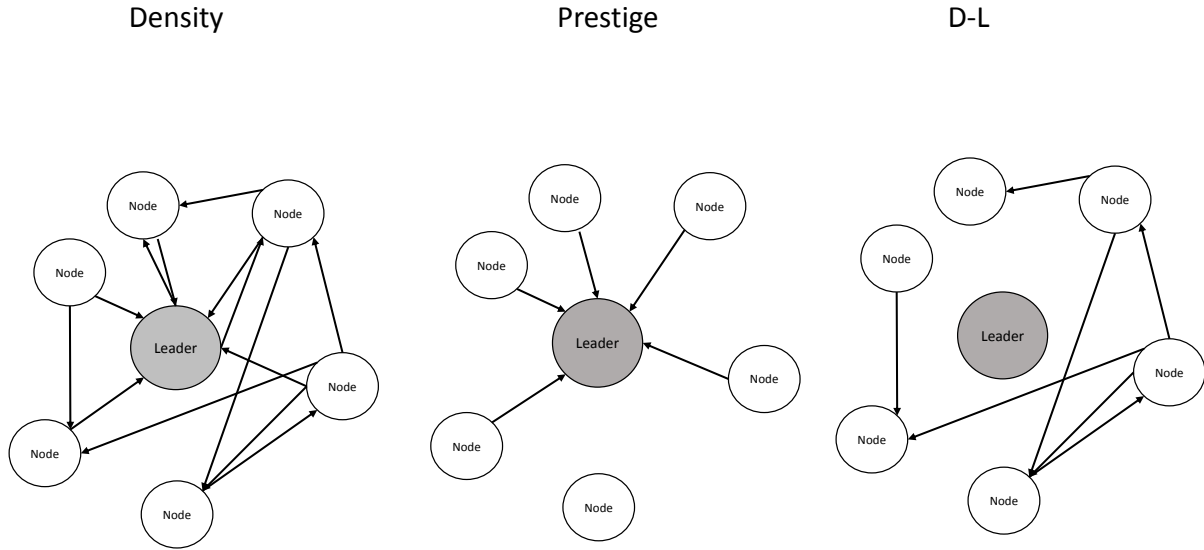


Figure 5.5: Diagram of prestige, density and D-L variables.

*Figure 5.5 shows a leader node (grey) with a number of team member nodes. Density reflects all of the ties (both inward and outward). Prestige describes the inward ties received by the subject node (in this case the leader). Finally D-L is a variable constructed to account for density minus the leader's inward and outward ties.*

to task complexity. On the other hand a Below Standard assessment, or lower, is seen as drastic and unnecessarily punitive in most cases. An assessment as low as this requires a repetition of the serial placing the vessel under more pressure and requiring some deft planning to fit the repeat serial into the schedule. Interviews with sea-riders confirmed this bias which served to make an OLS regression unsuitable. I decided to split the assessments into two ranges: high and low. The cut-off point was the Very Satisfactory assessment, which was designated high, as were superior assessments. Satisfactory and lower assessments were deemed as a low performance. In reality a Satisfactory assessment is extremely acceptable and not considered a low performance. The designation was simply to aid the analysis: having dichotomised the output variable, the data were amenable to a logistic regression. The full dataset for Project 2 can be found at Appendix B.

Logistic regressions are being increasingly used by social scientists to analyse dichotomous variables because they are better suited than OLS regression for this kind of analysis (Peng and So, 2002; Peng et al., 2002). The regression took place using a data set imported into Stata 13 from a spreadsheet. The spreadsheet listed each serial with dichotomised assessment, team, leader's prestige, team density and key player's prestige. The latter variable was simply the highest prestige among the team members regardless of their formal leadership position. This variable captured

the notion of emergent informal leaders. The team was simply the department or sub-department executing the serial in question. This could be a small team, large department or it could be the whole ship, that is to say a 40-person team.

## 5.4 Results

### 5.4.1 Introduction

A logistic regression was applied to the data set described earlier. This section will describe the data before describing the results of the logistic regression of prestige variables. A number of other variables and their effects on the analysis are discussed as confounding variables in the next section. This includes a discussion of the results of the density variable D-L. Finally a full evaluation of the regression is given.

### 5.4.2 Summary of independent variables

Table 5.2 summarizes the independent variables for 345 serials:

Variable	Mean	SD
Professional Prestige	0.574	0.297
Personal Prestige	0.356	0.273
Sports Prestige	0.235	0.269
Social Prestige	0.413	0.329

Table 5.2: Summary of independent variables

Participants in the sample exhibited the highest degree of prestige in professional respects. Social prestige is the second highest followed by personal prestige and finally sports prestige. These results do not indicate a difference between advice networks (professional and personal prestige) and participation networks (social and sports prestige) since they are mixed in rank terms.

### 5.4.3 Multivariate analysis

Tests of independence *between* the predictor variables, shown at table 5.3, demonstrate that these variables are not independent of each other. The correlation suggests a possible problem with multicollinearity. However a diagnosis using variance inflation factor (VIF) failed to expose multicollinearity as a problem (see Table 5.4).

The VIF scores do not indicate any serious multicollinearity although the correlation between the prestige variables suggests that some kind of interaction still exists. A multivariate logistic regression was conducted with sea training serial assessments as the dependent variable and the prestige

	Combined	Professional	Personal	Sports	Social
Combined	1.000				
Professional	0.836	1.000			
Personal	0.687	0.588	1.000		
Sports	0.564	0.269	0.249	1.000	
Social	0.453	0.546	0.228	0.310	1.000

Table 5.3: Summary of the correlation between prestige variables

Prestige variable	VIF	$\sqrt{VIF}$	Tolerance	$R^2$
Professional	2.11	1.45	0.470	0.526
Personal	1.60	1.26	0.627	0.373
Sports	1.15	1.07	0.870	0.130
Social	1.53	1.24	0.654	0.346

Table 5.4: The variance inflation factor for the prestige variables

variables as the independent variables for 354 serials ( $N = 345$ ). The results are shown at Table 5.5.

Prestige Network	Odds Ratio	$p \geq \chi^2$
Rank†	0.995	0.936
Professional	3.391	0.034*
Personal	1.922	0.212
Sports	1.644	0.273
Social	1.172	0.711

Table 5.5: The results of the multivariate logistic regression of team performance and prestige

\*  $p \leq 0.05$ ,  $N = 345$ , † - *control variable*

The overall model is significant ( $p = 0.0001$ ,  $LR\chi = 24.47$ ), however only professional prestige achieved significance as an independent variable. This suggests that the correlation between the independent variables is too great to fit a multivariate model, although the significance of the overall model and the relative effect sizes agree with the separate regressions at Table 5.10. Controlling



for rank also supports the decision to remove rank from the analysis. The multivariate model is not discussed further, an evaluation of the separate regression models is discussed in the next section.

#### 5.4.4 Univariate analysis

A logistic regression was used to test the hypothesis that leaders' prestige in each of the four dimensions is correlated with improved team performance. The results are displayed in table 5.6:

Variable	Odds Ratio	$p \geq \chi^2$	$LR\chi^2$	Pseudo $R^2$
Professional Prestige	6.065	0.000**	21.01	0.046
Personal Prestige	4.814	0.000**	14.40	0.032
Sports Prestige	2.854	0.001**	6.48	0.014
Social Prestige	2.616	0.005**	7.98	0.0176
Combined Prestige	12.947	0.000**	22.38	0.0494

Table 5.6: Summary of logistic regressions of team performance and independent variables  
 \*\*  $p \leq 0.01$  ( $N = 345$ )

The results demonstrate that leader prestige in all dimensions has a significant positive correlation with team performance during Sea Training. All of the hypotheses relating to the role of leader prestige are supported with highly significant results and large effect sizes. A combined variable for prestige (representing mean prestige in all dimensions) achieved the largest effect size, which was highly significant. It also demonstrated the highest goodness-of-fit and variance statistics. Professional prestige boasts the largest single effect size, followed by personal, sports and finally social prestige. The effect sizes are large due to the fact that the regression measures the increased odds ratio for a change in the independent variable of 1 unit. In this case the independent variables are measured from 0 to 1. Therefore the odds ratio measures the change should a team with no ties to the leader transform to a point where the leader receives 100 per cent of the available ties. Although it is possible for a leader to receive either zero or all available ties, these are extremes and hence the odds ratio represents an extreme shift in the relevant dimension. Nevertheless, the potential for professional prestige, for instance, to increase the chance of a high team performance by six times is strong support for the role of professional advice networks.

The regression generates an equation describing the intersection with the y-axis and a coefficient describing the steepness of the regression line. The coefficients demonstrate that combined prestige has the greatest effect size, followed by professional, personal, social and sports prestige. The results show that:

$$\text{Predicted Logit of High Performance} = -1.597 + (2.561) \text{ X Combined Prestige [H1]}$$

$$\text{Predicted Logit of High Performance} = -1.628 + (1.803) \text{ X Professional Prestige [H2]}$$

Predicted Logit of High Performance =  $-1.333 + (1.571) \times \text{Personal Prestige}$  [H3]

Predicted Logit of High Performance =  $-0.808 + (1.049) \times \text{Sports Prestige}$  [H4]

Predicted Logit of High Performance =  $-0.962 + (0.961) \times \text{Social Prestige}$  [H5]

#### 5.4.5 Confounding variables

##### Formal and informal leadership: the significance of rank

As discussed in the Literature Review (Chapter 2) there is some overlap in definitions of rank and prestige. Prestige is often conflated with socio-economic status in leadership studies (e.g. (Bass and Bass, 2008: 170)). For the sake of clarity, prestige for the purpose of this study is “freely conferred deference” (Henrich and Gil-White, 2001). It is necessary, therefore, to be clear about whether the regression is using prestige or status as an independent variable. Status is defined as rank in this study since it captures socio-economic differences to a large extent, and it is easy to measure in a military environment. Prestige, as discussed in the methodology section, relates to inward ties (not all ties, as this defines centrality (Wasserman and Faust, 1994: 169)) thus capturing “freely conferred deference”.

The difference between rank and prestige can be seen when correlating rank with each type of prestige used in Project 2. This is shown at Figure 5.6. Even the professional network is not completely correlated with rank. The 32 % divergence between rank and professional prestige suggests a significant informal element to prestige. The personal advice network suggests that at least half of this measure of influence is informal. Social networks have a low level of correlation whilst sports networks have no correlation at all.

Another serious problem with conflating rank and prestige in this particular study is the distribution of leadership during sea training. The dependent variable is based on various tasks ranging from simple to complex and using small to large teams. The leaders’ prestige scores relate to Leading Hands (one rank up from Able Seaman) to Commanding Officers. The variance in rank is not likely to explain variance in team performance, given that Commanding Officers usually lead teams in far more complex tasks than Leading Hands. A logistic regression of rank and team performance gives a non-significant result with an odds-ratio of 0.95 ( $p = 0.405, \chi^2 = 0.69, R^2 = 0.0015, N = 345$ ).

The odds-ratio, close to one, demonstrates very little effect of rank on team performance. Although counter-intuitive, the result of the regression makes sense when the degree of difficulty for higher ranked leaders is considered. Additionally, it demonstrates the effect of high-prestige/low rank leaders and vice versa. These situations demonstrate the power of informal leaders. Intuitively, the Commanding Officer is unlikely to take command of the Galley to prepare lunch, not because it is beneath her, but because the Leading Chef is more competent in that situation. Prestige accounts for situation, especially professional advice networks. Therefore I do not consider formal leadership any further in this analysis but focus on the emergence of informal leadership, defined as prestige. This does not detract from the power of formal leadership which includes authority and expert power (French et al., 1959) but suggests prestige has been underestimated on occasion.

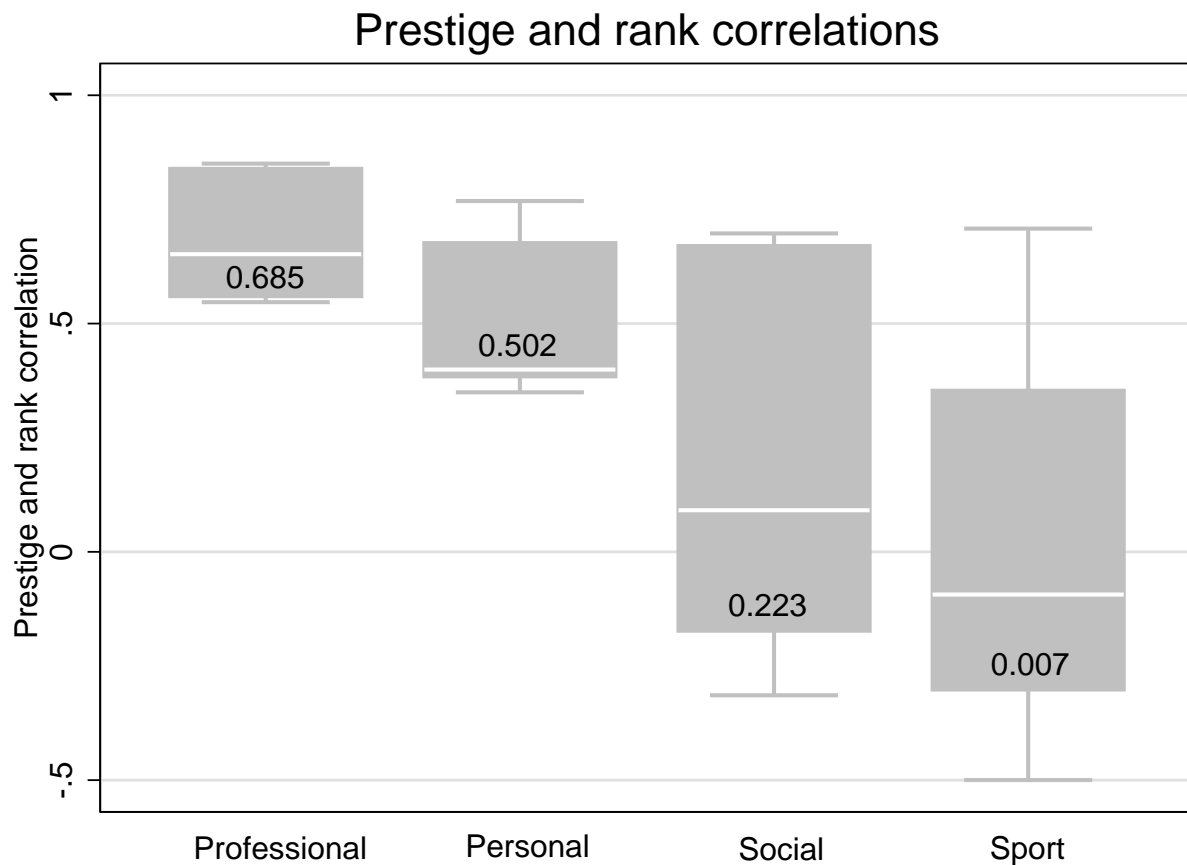


Figure 5.6: Correlation of rank and prestige in different interaction-dimensions  $N = 320$   
*The box plots show the median correlation of rank and prestige as a white line. 25th and 75th percentiles appear below and above this line respectively. Minima and maxima are indicated by whiskers and the mean correlation is shown as a figure in each box. The rank and prestige scores are based on the whole population of all 8 ships in the survey ( $N = 320$ ).*

### Phases of training (temporal considerations)

The possibility of increased proficiency as a result of training would partially explain some variance in team performance. Flag Officer Sea Training (FOST) split the five week training period into three phases. Each subsequent phase is delivered with an increased degree of difficulty. This factor should mitigate the likelihood that serial assessments would naturally rise over the period. To test this assumption a supplementary logistic regression of performance training phases was conducted. The results are shown at Table 5.7:

The stage of training denoted by the variable “Training Phase” has no statistically significant effect on the odds of achieving a superior performance assessment. Despite an increase in compe-

Variable	Odds Ratio	$p \geq \chi^2$	$LR\chi^2$	Pseudo $R^2$
Training Phase	0.7871	0.2563	1.29	0.0028

Table 5.7: The effect of training phases on performance  
 $N = 345$

tence in the training serials there is no increase in assessment scores over time. This suggests that the degree of difficulty (which also rises over time) counters the improved ability of the crews. In any case time spent training does not affect the dependent variable significantly.

### Density

A rather more complex issue is that of background interaction. Removing leader prestige from the more generalised team interaction (measured by the density variable) required the computation of a density variable named "D-L" (see Figure 5.5). However, D-L and prestige measures were shown to exhibit a great degree of correlation. Table 5.8 tabulates the correlation of all the prestige scores in the sample with all of the density and D-L scores:

Prestige Variable	Density	D-L
Combined	0.7904	0.6392
Professional	0.6499	0.3630
Personal	0.6305	0.3121
Sports	0.6489	0.4618
Social	0.8507	0.7513

Table 5.8: Correlation of prestige with density and D-L.

It is therefore not possible to distinguish between density and leader prestige as the variables are highly correlated. Although the D-L variable removes the confusion of leaders' contributions to density, it can be seen at Table 5.8 that this variable remains highly correlated with prestige in all cases. This suggests that prestigious leaders are members of interactive groups and there is no way, from this exploration, to determine the direction of causality. In fact a regression of prestige and density in all dimensions reveals a highly significant correlation between the variables regardless of the leader's contribution ( $\beta = 0.583$ ,  $F = 236.91$ ,  $p \geq F = 0.000$ ,  $R^2 = 0.4085$ ). Either interactive teams encourage more interactive leaders or vice versa. In any case, the study does not aim to discover how leaders *become* interactive but to gauge how interactive leaders affect performance. Before finishing with density it is necessary to determine the effect of density on performance and whether the effect of prestige is sufficiently different. The results of the logistic regression of density (D-L) and team performance are displayed at Table 5.9. In fact, D-L only achieves a significant correlation once (for professional density). Therefore density is not considered further.

Variable	Odds Ratio	$p \geq \chi^2$	$LR\chi^2$	$PseudoR^2$
Combined D-L	2.304	0.0811	3.04	0.0067
Professional D-L	2.400	0.0353*	4.43	0.0098
Personal D-L	1.2568	0.6202	0.25	0.0005
Sports D-L	1.8818	0.0677	3.34	0.0074
Social D-L	1.5698	0.1858	1.75	0.0039

Table 5.9: The results of the logistic regression of team performance and team density (D-L).

\*  $p \leq 0.05$ ,  $N = 345$

### Leadership emergence

Many leadership studies have considered the emergence of leadership to be important (e.g. Lord et al. (1986)). In the context of this study leadership emergence is gauged in the rise of informal leaders, that is high prestige actors who are not formal leaders. I therefore captured the prestige measurements of informal leaders. A prestige measurement was recorded for members of the team with the highest prestige score who were not formal leaders. These data are expected to account for prestigious members of each team who may influence team performance informally. The results of this regression are recorded at Table 5.10.

Network	Odds Ratio	$p \geq \chi^2$	$LR\chi^2$	$PseudoR^2$
Combined	2.178	0.0926	2.83	0.0062
Professional	2.414	0.0285*	4.80	0.0106
Personal	1.378	0.3865	0.75	0.0017
Sports	1.6777	0.1229	2.38	0.0053
Social	1.297	0.4207	0.65	0.0014

Table 5.10: The results of the logistic regression of team performance and prestige of informal leaders

\*  $p \leq 0.05$ ,  $N = 345$

The results demonstrate that informal leaders have a positive effect on team performance in professional networks. The other networks, however, had odds-ratios close to one and did not achieve significance. The positive result for professional networks justifies the role of informal leaders in at least one situation. Additionally the failure of rank (formal leaders) to achieve any significant effect on team performance (see earlier section on formal and informal leadership) suggests that a combination of formal and informal influence is optimal.

### 5.4.6 Evaluations of the logistic regression

Evaluations of the regression were based on the guidance of Peng and So (2002), Peng et al. (2002) and Garson (2014). Accordingly the following appraisal of the models are based on (a) overall model evaluation, (b) statistical tests of individual predictors, (c) goodness of fit statistics, and (d) validations of predicted probabilities (Peng et al., 2002). The results demonstrate a positive relationship between all prestige predictors and team performance.

In the following section, I move on to evaluate the improvement of these models over the intercept only model, following the advice of Peng et al. (2002). Table 5.11 shows the likelihood ratio tests for each prestige variable expressed as a Chi-Squared value:

Independent Variable	Likelihood Ratio Value
Combined Prestige	22.38
Professional Prestige	21.01
Personal Prestige	14.40
Sports Prestige	6.48
Social Prestige	7.98

Table 5.11: Results of likelihood ratio tests of each predictor variable

The results show that each variable is an improvement on the intercept only model, that is to say the null hypothesis.

The statistical test of individual predictors suggested by Peng et al. (2002) is Wald's Chi Squared Test. The results of these tests are at Table 5.12:

Independent Variable	Wald's $\chi^2$	$p \geq \chi^2$
Combined Prestige	20.72	0.0000
Professional Prestige	19.41	0.0000
Personal Prestige	13.86	0.0002
Sports Prestige	6.42	0.0113
Social Prestige	7.89	0.0050

Table 5.12: Results of Wald's Chi-Squared Test of individual predictors.

As with earlier tests combined and professional prestige fits the data best but the other predictors are significant and achieve acceptable test values. The Hosmer-Lemeshow (H-L), which is

a Pearson Chi-Squared statistic, was used to establish the goodness-of-fit. An insignificant result allows the null hypothesis to be rejected, suggesting a tenable model fit to the data (Peng et al., 2002). Pseudo R-Squared statistics estimate the variance explained by the model, although these indices are not as reliable as for other regressions. Therefore they are used as supplementary to other evaluations in logistic regressions (*Ibid.*). The test statistics are tabulated at Table 5.13:

Independent Variable	H- L Statistic	$p \geq \chi^2$	$PseudoR^2$
Combined Prestige	48.27	0.4321	0.0494
Professional Prestige	36.31	0.1646	0.0464
Personal Prestige	22.07	0.5752	0.0318
Sports Prestige	20.18	0.3225	0.0143
Social Prestige	31.01	0.2278	0.0176

Table 5.13: Results of Goodness-Of-Fit tests of independent variables.

Pseudo R-Squared statistics explain very low values of explained variance for each variable. Since this measure cannot always be relied upon (Peng et al., 2002) and the H-L statistics are tenable, it is assessed that each model has an acceptable fit to the data.

Graphing prediction accuracy is another valuable method of validating the predicted probabilities from a logistic regression (Peng and So, 2002). The graphs at Figure 5.7 (below) demonstrate the degree to which predictions agree with the data using the receiver operating characteristic (ROC) curve.

Classification tables describe the validity of the logistic prediction (Peng et al., 2002), (Garson, 2014). The percentage of correct predictions made by the models is tabulated at Table 5.14:

Independent Variable	Percentage Correct
Combined Prestige	65.80
Professional Prestige	64.64
Personal Prestige	64.06
Sports Prestige	64.64
Social Prestige	63.48

Table 5.14: Post-estimation classification table outputs.

In each case the predictive validity is above the normally accepted cut-off level of 0.5 (Peng et al., 2002), demonstrating the superiority of each model over the null model. In other words each model predicts at an accuracy significantly greater than chance. The ROC curve plots the proportions of events correctly classified (called sensitivity or true positive fraction) against 1 - misclassified events (called specificity or false positive fraction) (*Ibid.*). The model with the largest area under the curve is considered the best model. In this case professional prestige has this honour whilst sport prestige

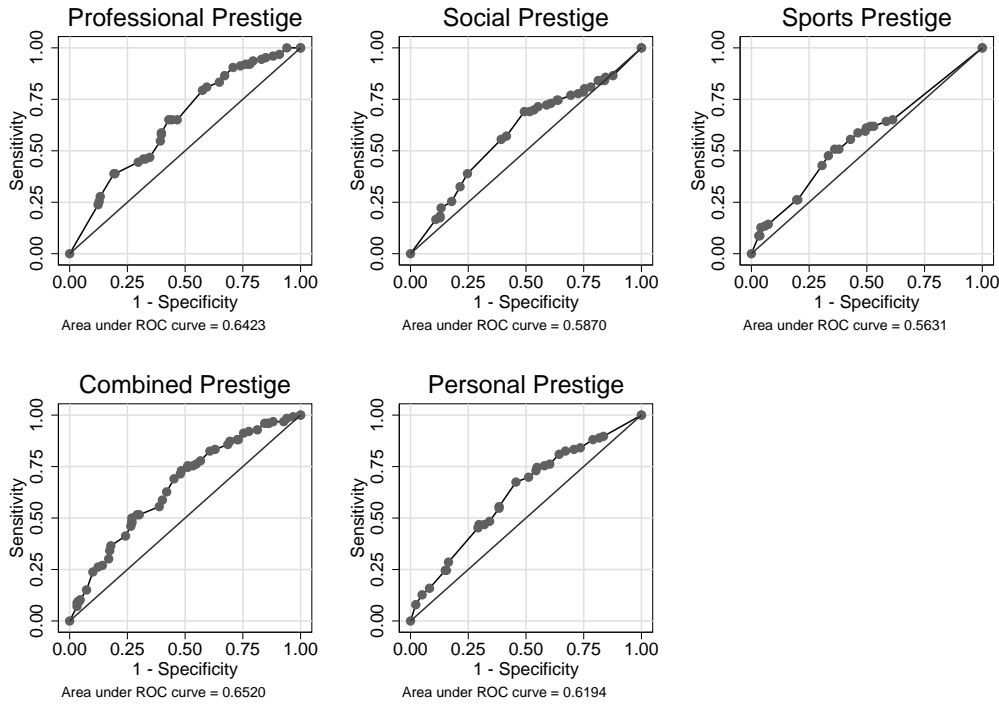


Figure 5.7: ROC curves for prestige variables.

has the lowest area, owing to an abrupt flattening of the curve above 60 percent. However all curves have an area under the curve between 56 and 64 percent, demonstrating an adequate model.

#### 5.4.7 Predictions

All leader prestige variables are correlated with high team-work assessments using a robust and internally valid outcome variable. The preceding statistical tests and model evaluations support the models described and rejection of the null hypothesis (outcome and predictor variables are independent). Figure 5.8 shows the effect of each variable on the predicted probability of success. In order to achieve a linear description of the relationship between the prestige variables and the probability of high performance, the logit is converted back from the logarithm; otherwise a sigmoidal curve would be displayed.

The steepest associations are the two advice networks, professional and personal prestige. Although professional prestige in leaders does not predict the highest probability outcome it must be noted that the probability of success with no professional leader interaction is the lowest. The regression also gives the highest coefficients for this variable. Professional prestige demonstrates, the highest correlation with the high performance. Of the two (slightly flatter) correlations, sports prestige demonstrates the highest possible outcome but also has a higher probability of success with no interaction. This makes judging between the two participation networks difficult. However, the



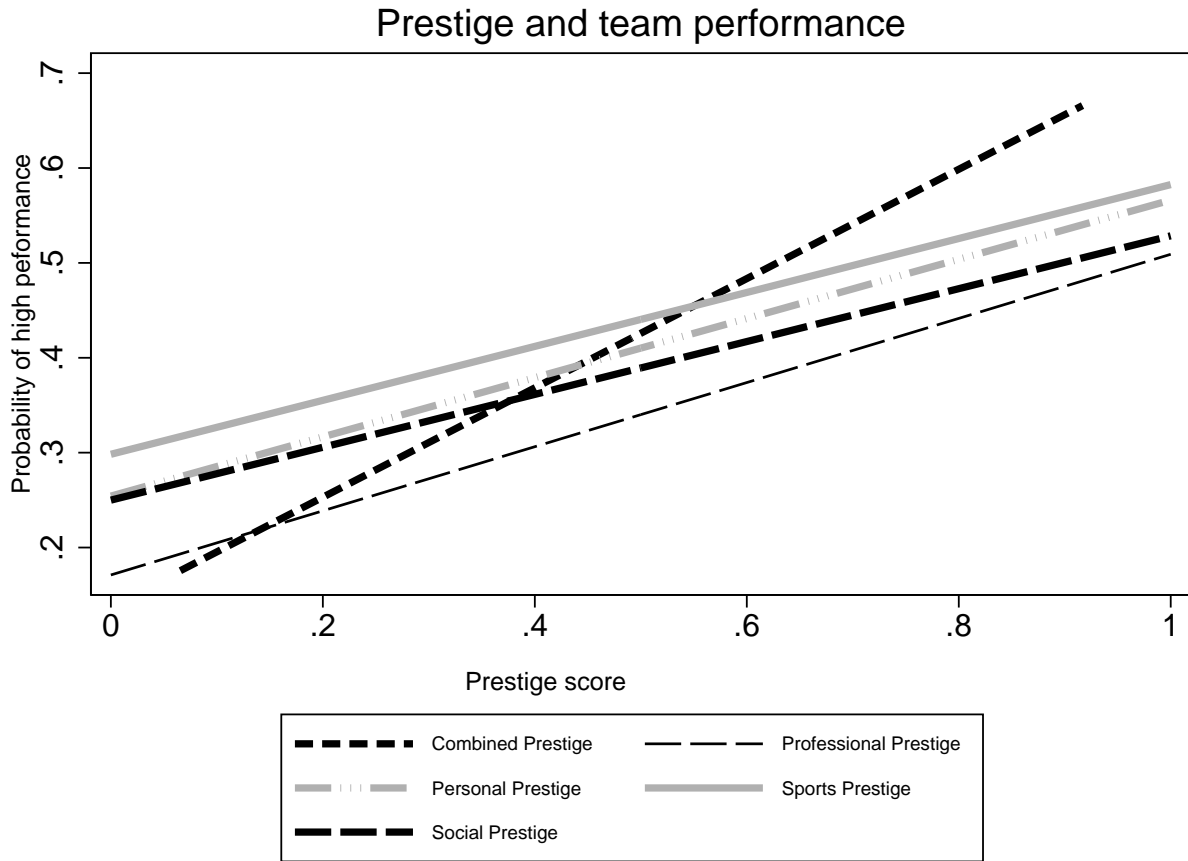


Figure 5.8: Prestige variables and probability of high performance.

regression, again, confers a higher coefficient on social interaction while this variable also has a better fit, statistical tests and predictive validity than the sports variable.

## 5.5 Discussion

### 5.5.1 General discussion

The results support the hypotheses posited in Project 1 that leader-follower interaction expressed in the dimensions proposed is positively correlated with superior team performance. The best model is for leaders who have the highest mean prestige across all four dimensions. Interaction of this kind also demonstrates the greatest effect size. Of the raw prestige variables professional prestige demonstrated the best fit and effect size. This was followed by personal prestige then social and sports prestige.

Project 1 data supported professional prestige as the most important type of leader credibility, especially because of the role of professional leaders as sources of information. Further research

which studies the effect of professional and personal prestige on the transmission of information would be beneficial to explore this aspect in more detail. I noted that, for many of the ships studied, positions such as the Marine Engineering Officer were often highly prestigious in professional terms. This position is not the most highly ranked but is often the oldest and most experienced individual on board. There is, therefore, support for further investigation based on the effect of professional credibility and age on information paths in the social network. Many of the sailors in the focus groups (Chapter 4) indicated that professional credibility was more important than the need for other types of interaction.

The elimination of rank as a predictor of team success and the positive result for informal leaders in professional networks supports prestige as a means of gauging informal leadership emergence.

The case for participation networks is also made by this research. Both types studied have a significant effect on team performance. The participants in the Interact Focus Groups included other forms of participation such as getting involved in cleaning the Ship (“scrubbing out”) or loading stores onboard (“store ship”). Further research into leader participation could therefore include a number of activities. The role of participation would appear to be the opportunities it gives leaders to operate on a level status plane with subordinates (Offord et al., 2016).

### 5.5.2 Theoretical implications

The logistic regression of these data strongly supports the role of the competence cluster “*interact*”, as defined by Young and Dulewicz (2009, 2008, 2007, 2006, 2005) in command leadership and management. These authors indicated the value of interaction in the RN but also in broader leadership contexts. In fact the competence framework was adopted by a number of organisations including the RN (Young and Dulewicz, 2008), where the *interact* competence was re-named *people skills* (Navy, 2011a). As discussed in Chapter 2, these studies used appraisal reports to determine the output variable. This study complements these earlier studies by using direct observation of team performance as the output variable. The direct observation method has a high degree of internal validity demonstrated by the comparison of Sea-Riders’ performance reports with the guidance given by the Operational Sea Training Guide ( $\alpha = 0.9043$ ). The foundational research also uses psychological instruments to derive leadership categories (i.e. competencies). This project adds to this description of what leaders are to ascertain what leaders do. I have made a contribution to Young and Dulewicz’s original foundation by adding an alternative and highly objective validation of their findings. Finally, I have re-validated and therefore strengthened their results.

Another contribution of this research is to add detail to the notion of trait-processes of leadership. While there has been progress in terms of developing trait-process approaches to leadership, the process itself, remains a “black box” (Casimir et al., 2014). This research demonstrates the connection of leadership processes, in this case interaction, with individual difference, such as competencies and traits. The data show this interaction can take two forms: advice and participation. Furthermore these networks are developed prior to team activity, where leadership is more generally thought to be enacted. In other words development of advice and participation networks is antecedent to more crucial group events. Unless leaders have professional credibility or have built up their bonds with the group, decisions and leadership style will be less effective. If leaders are

able to build networks based on all four dimensions studied here, a considerable improvement in team performance can be achieved. This resonates with recent leadership discussion that suggests leadership is built up by everyday encounters and events (Karp, 2013; Larsson and Lundholm, 2010).

Since the networks I have studied for this analysis were established prior to the events to which they positively contributed, it follows that at least some influence is developed in mundane events before the team can function to its full potential. I have named the advice and participation networks the two modes of interaction, but one might equally use the term ‘engagement’. Professional, personal, sports and social interaction are, therefore, dimensions which are placed beneath the higher group, modes, in this taxonomy. I suggest that professional and personal dimensions are the only two dimensions of the advice mode of interaction. On the other hand, sports and social interaction are just two of many possible dimensions of participation. Both modes of engagement describe leader behaviours and help to create follower effects which ultimately lead to multi-level outcomes. The modes of interaction describe the *proximal predictors* in the trait-process model suggested by (Antonakis et al., 2012).

In the case of advice networks the build up of credibility and prestige would appear to increase the influence leaders have to coordinate team activity. But more research is required to discover exactly how influence is increased during the events under study. In the case of participation networks, Project 1 indicates that self-levelling acts to ward off undesirable follower effects, such as resistance and levelling. As a result of this project there is a clearer view of leadership trait-processes emerging but some questions remain.

Both modes and all four dimensions of interaction suggested in Project 1 (see Chapter 4) are supported by the data analysis in Project 2. This is empirical support for the qualitative findings of the focus groups. The focus groups were intended as exploratory research so the use of “mixed methods” (qualitative and quantitative) has been beneficial. There is also empirical support for the published research based on Project 1 (Offord et al., 2016) where we described a synthesis of existing theories of engagement, disengagement and resistance. These results describe how engagement is achieved through leader prestige.

My findings support the call for more follower-based studies of leadership (e.g. Meindl (1995)) in that follower behaviour is clearly implicated in the social networks which support higher team performance. This in turn has much in common in other post-heroic approaches such as ELT and, to some extent, trait-process methods. However, the density of the four types of network was not significantly correlated with performance unless it included the leaders’ ties. Leader prestige however was significantly correlated with performance. With the ships studied in Project 2 leaders made a significant contribution to performance, whereas team cohesion did not. The project therefore supports the need for leadership and, in this context at least, formal leaders. A logistic regression of prestige values for team members who did not occupy formal leadership positions revealed no significant relationship with performance. This analysis was designed to explore the hypothesis that informal leaders may emerge when individuals command high levels of prestige. In this context, however, the formal position of a leader *combined* with prestige is the only situation where team performance is enhanced. While the need to incorporate follower traits and behaviour is supported by the findings, this point underlines the perils of excluding from study the traits and behaviour of

leaders themselves.

Anthropological theories of prestige as a channel for cultural transmission (e.g. Henrich and Gil-White (2001)) suggest a possible explanation for the finding that prestige in leaders is correlated with higher team performance. Advice networks, particularly professional prestige, seem likely conduits for “information goods” which are required to coordinate groups. Prestigious leaders in this respect are presumably able to move information around the network more efficiently due to the conferred value of that information. Further research could observe directly the role of the prestigious leader and their role in directing information.

### 5.5.3 Practical implications

This research demonstrates that team bonding occurs when teams develop networks in which leaders can develop prestige in a number of directions. Firstly they must establish themselves as credible sources of advice. This presumably requires the acquisition of skills and knowledge and they must also be approachable in order to dispense this advice. Secondly leaders can develop prestige in other ways by participating in activities with their colleagues. An important consequence of this is that team bonding and leadership emergence occur through fairly mundane interaction over time. This means that in addition to individual career-spanning leadership development, leaders develop their leadership in-situ. It is important therefore that this process is allowed and encouraged to develop. Reliance on individual leadership development will not necessarily create a high performing team or possibly even a good leader, since that leader could be thwarted by his or her own followers. The RN has a well-respected through-career leadership development programme which supports both officers and ratings at each position (St George, 2012). However, this is discharged by Leadership Academies. Nowhere is there a “Teamwork Academy” or a policy of teamwork development. Future policy could include arrangements to allow teamwork to be developed in addition to leadership training. This could be achieved quite easily by allowing provision to be made for the encouragement of the development of advice and participation networks. The best place to do this would be on the job in existing teams.

The results demonstrate the importance of professional credibility in leadership, a point often missed by both trait and competence approaches as well as by other views of leadership. In the search for more appealing qualities, the basic currency of leadership in the work place, professional knowledge, can be overlooked. Fast-track schemes which seek to identify loftier leadership skills by their very nature are apt to miss this critical mode of interaction. The RN has, in the CCF, already included this factor in its competency cluster *Warfare Skills*. This research therefore validates this modification to the original competency framework established by Captain Mike Young RN and Professor Victor Dulewicz (Young and Dulewicz, 2005, 2006, 2007, 2008, 2009). This is however, the only Command Leadership and Management (CLM) framework in the RN to incorporate professional credibility and capability for personal support. This is because the CLM framework based on the research of Young and Dulewicz (*Ibid.*) is used for leadership development training courses rather than selection for a specific role. Professional capability is assessed separately through professional selection and training for promotion. However this research demonstrates clearly the need to combine both aspects.

#### 5.5.4 Conclusions

The purpose of the study was to investigate the role of leadership interaction in team performance. Specifically two modes and four dimensions of interaction were implied by Project 1. This project defined beneficial leadership-interaction in terms of advice networks (professional and personal) and participation networks (sports and social). The quantitative investigation, using logistic regression, has validated these types of interactions. All four dimensions are significantly correlated with team performance. The team performance measure is also shown to be reliable. Interaction between team members (discounting leaders' interaction) in the four dimensions discussed, does not positively affect team performance.

My results support a build up of leader prestige via everyday and mundane interactions in contradiction to heroic theories of leadership. This is not to suggest that leaders' individual differences are insignificant since this research also validates the RN's use of a competency framework. A leader's competence (*interact*) is shown to be an important antecedent to group coordination in action. This finding also shares common ground with trait-process theories because individual differences partly determine the results of leader-follower interaction. These mundane interactions create proximal factors in leadership outcomes as predicted by trait-process theories (e.g. Antonakis et al. (2012).)

The role of self-levelling is demonstrated by enhancing the prestige of leaders who voluntarily participate in activities with followers on equal terms. More pertinently it shows the importance of ambivalence and resistance to leadership since it is necessary for leaders to engage in self-levelling.

The results suggest further research questions. Although a correlation has been established it remains to be seen how prestige can positively enhance team performance. A theoretical explanation could be the role of prestige in valuating information goods. For example, Henrich and Gil-White (2001) argue for prestige bias as an explanation for higher-fidelity copying of information between individuals. It would be beneficial to develop the investigation of prestige by observing directly its effects on information dissemination within social networks.

Finally, the study also warrants an investigation of the effects of age and status on prestige, since there is some correlation with these factors but the exact relationship is not clear from the data collected so far. Evidently, age and status do not always predict prestige but there would appear to be some kind of bias.

## Chapter 6

# Information Pathways Project (IPP)

*Men quickly form a very shrewd opinion of your ability and your capacity for just dealing. It is on this assessment that their readiness to follow your lead and to work with a will under you, mostly depends.*

(The Royal Navy Officer's Pocket-Book 1944) (Lavery, 2007: 16)

## Overview

*Following Project 2, this project sets out to discover the dynamics of leader prestige and information transmission. Having demonstrated that the interact competence predicts superior team performance I hypothesised that each type of prestige would facilitate better information transmission and therefore improve group outcomes. Project 2 established four dimensions of prestige: professional, personal, sports and social. Two advice networks (professional and personal) were correlated with successful information transmission, as predicted, but the two participation networks (sports and social) did not. The results are discussed with relation to co-evolutionary approaches to prestige and trait-process theory from leadership studies.*

## 6.1 Introduction

Leadership outcomes such as team performance are positively correlated with leader prestige (see Chapter 5). This supports traditional notions of leadership invested in individuals and based to some extent on leader differences. It also supports the paradoxical view that followers influence leaders since it is they who assess prestige and possibly resist leaders who lack prestige. A picture is emerging of a process where leaders' intent is shaped by followers' ambivalence to leadership. The evidence explored so far suggests this process takes place via mundane encounters through which prestige is built up. The aim of this project is to develop the findings from the previous two studies. Specifically I aim to discover *how* prestige supports leadership. In doing so I will revise the trait-process paradigm and test hypotheses about the role of prestige in the leadership. Prestige

has been linked with the passing of information via “infocopying” prestigious individuals (Henrich and Gil-White, 2001). This was empirically tested by conducting a logistic regression of prestige variables and observations of information transmission.

In this introduction I will discuss where prestige fits in the trait-process model (Antonakis et al., 2012) in order to orientate the reader to the specific aims of the research. The findings of the previous projects will be briefly summarised in order to outline the direction of research for this project. None of the theoretical discussion is intended to duplicate that already described in Chapter 2 but to refine it for the purposes of this specific study.

### 6.1.1 Project 3

Following the development of the sequential exploratory design of this research I will remind the reader of my research aims, the progress of the research thus far and potential areas for further research in Project 3. This technique is known as *connecting* when used in mixed methods (sequential exploratory design) (Creswell, 2009: 209) to develop data collection priorities for quantitative projects. The research questions are:

1. What modes of interaction are most effective in supporting leadership emergence, in the form of prestige?
2. What modes of interaction are most likely to improve team performance?
3. How do effective modes of interaction actually lead to better teamwork?
4. How do ineffective modes of interaction lead to resistance?

Project 1 developed qualitative answers to all research questions. Project 2 investigated questions 1 and 2. As stated in Chapter 5, empirically measuring resistance or levelling behaviour is extremely difficult, given the covert nature of this behaviour. Question 3 relates to *how* interaction supports improved team performance. Project 1 participants strongly suggested the role of prestigious leaders as credible sources of information.

Since teamwork relies on sound information it seems likely that prestigious individuals will be seen as the best sources of advice or direction. Therefore high-prestige actors are likely to be “listened to” (Henrich and Gil-White, 2001) and their information passed to other nodes in the network. However, I have described prestige in four contexts (professional, personal, sports and social). Achieving professional objectives implies that professional credibility would be most beneficial; indeed this was the most highly correlated with team performance. However, all four dimensions achieved significant correlation with performance and it is therefore necessary to ascertain if all four have a bearing on information transmission. Since the reliability of information management is formally assessed for warships on Operational Sea Training (OST), naval teams are a good context in which to test the hypotheses stated below:

1. H1: Individuals with high professional prestige are able to pass information through a social network with high fidelity.
2. H2: Individuals with high personal prestige are able to pass information through a social network with high fidelity.
3. H3: Individuals with high sports prestige are able to pass information through a social network with high fidelity.
4. H4: Individuals with high social prestige are able to pass information through a social network with high fidelity.

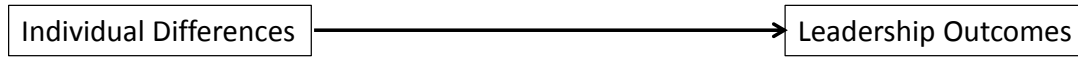
Project 3 was designed to evaluate the effect of prestigious leaders on the passage of information, connecting project data collection goals with an original research question. Question 3 concerned *how* interaction supports teamwork. Once again a naval context was chosen, but a different one to Project 2. Although a different type of vessel was chosen, it was a similar environment: a small close knit and well defined group. The physical and social boundaries of the team allow a well defined and manageable social network to be defined. Through this network important information could be monitored as the ship performed a number of critical tasks. The aim of the project was to ascertain if *infocopying* of prestigious leaders occurred.

### 6.1.2 Trait-process

The trait-process model proposed by (Antonakis et al., 2012) describes distal and proximal predictors of leadership outcomes. I define the competence *interact* as a distal predictor and *leader behaviours* as a proximal predictor. However, there is more detail to be added which links leader and follower behaviours within the model shown at Figure 6.1. At each stage of the model how do these leadership behaviours affect followers?



# CLASSIC TRAIT LEADERSHIP MODEL



# TRAIT PROCESS MODEL

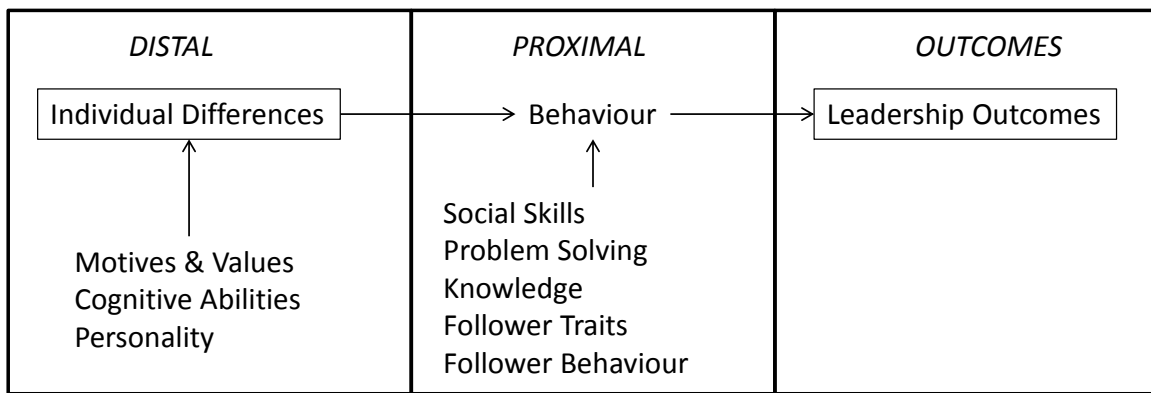


Figure 6.1: Classic trait and trait process models of leadership

Figure 6.1 is misleadingly simple because the dynamics within the proximal region of the model are clearly extremely complex. Trait process theory has not developed to the point where the interactions and encounters which define the model are completely understood. This has resulted in the process being described as a “Black Box” (Casimir et al., 2014). However, both projects in this study suggest that prestige is strongly implicated in the process. A search of leadership literature reveals very little relating directly to leader prestige and team performance or leader emergence. Like resistance theories (see Chapter 2), prestige is a neglected area of leadership studies.

## 6.2 Methodology

The aim of this section is to describe the data theory behind the methodological choices pertaining to Project 3. As SNA has been described in Chapter 5, I will not repeat the summary of theory and methods of SNA. I will describe the variables extracted by SNA and the differences between this project and the preceding one. I will begin with a description of the context followed by the

practicalities of data collection. The final part of this section will describe how the data were analysed.

### 6.2.1 Description of the data

The data were collected onboard the Falkland Islands Patrol Vessel, HMS Clyde. She is an Off-shore Patrol Vessel (OPV) stationed at East Cove Military Port on East Falkland approximately 40 miles south-west of the capital, Stanley. She is a relatively small vessel of 2000 tonnes and 81 metres in length, although she is significantly larger than the mine-hunters studied in Project 2. Despite her size advantage, HMS Clyde has a slightly smaller crew of 39. I visited HMS Clyde for 5 days on two occasions spending time onboard alongside the jetty at the port, during days at sea and for an overnight period during each visit. The visits took place in February and August 2015 during the austral autumn and spring respectively. The crew change over every six months so the study involved completely different participants in each case. With 100 percent participation 78 personnel took part with an average age of 32.7. Only 9 participants were female.

HMS Clyde is the sole warship based in the Falkland Islands although other RN Ships and Submarines regularly visit the area. Being based in the South Atlantic, however, her crew are isolated especially since they are not part of the larger military base at Mount Pleasant, where the Army and Royal Air Force personnel are based. Additionally the South Atlantic is a notoriously challenging environment. The average temperature is 5 °C although sea temperature is often below this and the constant wind means that seas are invariably rough. HMS Clyde's mission is to patrol the Falkland Islands acting as a deterrent to any would-be aggressors towards Falkland Islands sovereignty. The crew therefore find themselves in an extremely challenging and lonely job. I expected to find a tight-knit and robust Ship's Company, ideal for research into team dynamics. The isolation also makes the group boundary particularly sharply defined.

Data were collected from 78 personnel regarding their choices for professional and personal advice as well as fellow participants in sports and social events. These data formed the independent (prestige) variables for the analysis as was the case for Project 2. The dependent variable was, however, of a different sort. In this case the dependent variable was a record of the success of attempts to pass operational information through the social network. The aim was to determine whether the prestige variable had a positive effect. These data were a summary of information routes with a dichotomous outcome: success or failure. 154 information pathways were collected. Appendix C contains the dataset used for the logistic regression. Appendix C also records the eight sociograms pertaining to the two crews.

### 6.2.2 Data collection

The reason for my visits to the South Atlantic was as the leader of a small training team delivering sea training for HMS Clyde. My specific responsibility was as the lead coordinator for all OPV training in the RN. For this purpose I travel to the Falkland Islands twice a year to train each successive crew in that theatre of operations. Since most of the training received by the crew is individual, I and the other sea-riders (as the trainers are called) are responsible for their collective

training; that is how they perform as a team. In the case of HMS Clyde this requires the delivery of a modest five day programme beginning with basic safety training. Once this has been completed, the exercises quickly increase in difficulty from dealing with single fires or floods, to dealing with multiple damage situations while prosecuting a maritime mission. As these exercises increase in complexity so does the need for efficient transfer of information. The Commanding Officer will ultimately be faced with a huge volume of different information. This will range from Battle Space data to internal engineering, manpower, medical and damage data. Public information in the form of State Boards and Main Broadcast information is not sufficient to maintain this essentially cybernetic system. Much of the information is passed orally from person to person. The flow of this information is usually from the source of data (e.g. the scene of a fire incident) via experts to the Command. Naturally there are a lot of opportunities for these data to become corrupted or completely lost.

My role as a sea-rider was to assess the Executive Department which is the section of the Ship charged with the efficient function of the Ship's routines. The Executive Officer is the second-in-command which means that the internal management of the Ship and the Command and Control (C2) functions were assessed by me. Because the Executive Department is truly one which functions throughout the Ship, I had to roam around the vessel and ask the Ship's Company a lot of questions from morale to specific mission criteria. My role was therefore very general, it was not unusual for me to be found anywhere and to ask anybody more or less anything. This suited the collection of information pathway data as I could observe information moving through the network in the form of situational reports (Sitreps) and commands without attracting undue attention. Additionally, I could ask the personnel what they had experienced, how they had come by certain information without attracting attention to my research goals, the participants would accept this behaviour as normal. The effect of sea-riders was a constant background factor throughout the research projects but my specific presence would not have been a moderating influence.

The original survey design required the collection of data flowing through the network. I had planned to collect data relating to path-lengths which spanned the whole network. During a pilot study, I discovered when collecting the data this was impractical. Information moved very quickly through the network with personnel moving rapidly through the Ship, through hatches and doors, via staircases and ladders while exchanging information on the move. Although telephone systems are available, they are very often busy or ignored. Consequently there was a preference to share data in person which required me to move through the Ship at the same speed as the information; an impractical task. It would also require me to shadow personnel in a way which was not typical of sea-rider and would therefore potentially alter behaviour. I tried asking the participants where they had obtained information from but I found these data to be unreliable. It appeared that the crew members were unable to recall accurately how they had come by certain information. I amended the project design to collect data only on messages which I observed directly. Although this resulted in path lengths of one in most cases, the data were reliable and I observed every instance of information transmission from its source. I could also observe directly whether a message had been successfully passed or not. The dependent variable was therefore dichotomous: message passed or not. These were recorded at the time by taking a note with notebook and pen. These data were later transferred to a spreadsheet recording the actors in the information path, their prestige variables and the outcome as a one or zero.

I recorded the dependent variable data over a period of 48 hours, the last 24 hours being spent on board continuously. Accounting for time not spent on the Ship and rest periods, data collection for the dependent variable took 30 hours for each visit. This period of two days was the last phase of the training package. This meant that I could use the preceding three days to collect the independent variable data and also that the Ship's Company had become accustomed to our presence. Additionally, the complexity and intensity of the exercises had increased to the point where information management had become critical to task success. I could therefore assess that successful passing of data would indeed result in higher team performance, linking this project with the findings of Project 2. The data concern two exercises (or serials). The first was a Damage Control Exercise (labelled DCX 1.1). DCX 1.1 begins with a simulated air attack performed by two Royal Air Force (RAF) Typhoons who fly attack profiles against the Ship. After a period of tracking these aircraft and responding to their actions using Ship's weapons, extensive damage is simulated. The damage takes the form of fires, floods, equipment failure and casualties.

The second serial was a 24 hour exercise which included the embarkation of an Infantry Company to transport them to a landing point elsewhere in East Falkland. This activity offers significant logistical challenges as 120 soldiers and all their equipment must be embarked for a long period. Additionally a hostile situation is simulated, requiring a good deal of long term command planning and decision making. The information used in this serial spans longer time periods and is less intense than for the first exercise, it is also more complex. There is a requirement to communicate up the naval chain of command on the Falkland Islands, to officers and soldiers of the infantry and to the Ship's Company to ensure that all are aware of the command objectives. Finally a number of incidents are simulated along the way to test the Ship's reactions and whether the Command Team can maintain mission focus.

The two serials therefore use different types of information but both require focus on the external environment (the Battle Space) and the internal environment (Platform). Internal information used during the serial includes Command Aims, casualty information, propulsion and weapon system configurations and defects, fire and flood information, threat information and so on. External data also include Command Aims but also mission data, threat information and enemy disposition. Broadly speaking the data collected concerned internal information since external data is generally used by the Command Team but disseminated publicly using Main Broadcast. The dependent variable data are shown at Appendix C.

The collection of independent variables (i.e. prestige variables) was identical to that in Project 2 (see Chapter 5). This means that prestige scores were based on social networks on the ship. These networks are not the same as the formal structures among the crew. This means that an individual with mission critical information is not at liberty to pass it to a person he/she trusts for professional advice or a sports partner. The information is typically passed to individuals in the same employment branch (e.g. marine engineer) and generally upwards in the hierarchy until it reaches the Command Team. The aim of the survey was to discover if this information was treated as more reliable if it came from a prestigious source.

A survey collected data on ties between all members of the Ship's Company in all four dimensions.

This resulted in four socio-matrices per visit. The R statistical programming language with the package *igraph* was used to derive prestige variables. These prestige variables were mean in-degree measurements for each actor, as utilised in Project 2. Short programmes were written to create sociograms; the code can be seen at Appendix C. The matrix operations to derive prestige and other SNA variables are native to the *igraph* package and not detailed here. An example of an OPV Sociogram is shown at Figure 6.2:

## OPV Professional Matrix

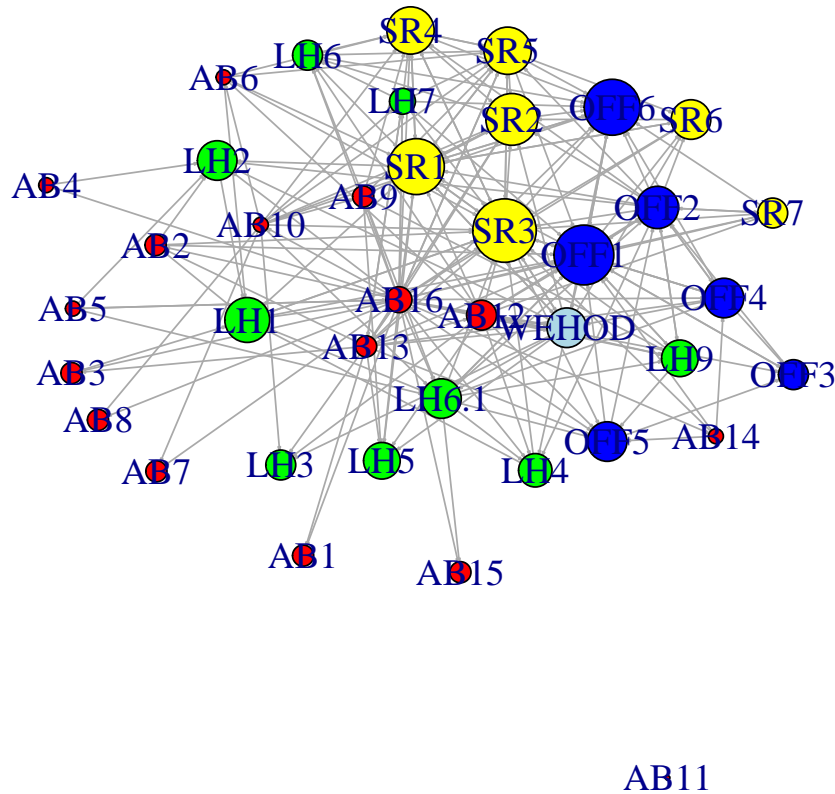


Figure 6.2: An example of a professional advice sociogram from the Falkland Islands Patrol Vessel  
*Key: Blue = officers, yellow=senior rates, green = leading hands, red = able rates. Prestige indicated by size of node.*

These data were collected using a tablet which was handed to each member of the Ship's Company in turn. It took three days to collect all of the data. The tablet was an improvement on the use of a netbook which was used in Project 2. The tablet is portable and can be used more easily than setting up a computer. This combined with the short period required (4 minutes) to complete, and the fact that the questions were not sensitive, meant that securing voluntary participation was not difficult and 100 percent feedback was obtained. Following Professor Liden *pers comm* (September 2012) and Sparrowe et al. (2001), I collected all the data onboard in a single day. By constructing a quickly completed survey with few questions and collecting it directly (without using e-mail or other correspondence), I achieved 100 % participation.

The collection of data, using the method described, had been cleared by the MOD Research Ethics Committee (MODREC) on 12 March 2012 (See Appendix E). Since the questions were not controversial and all data were anonymised, there were no ethical concerns (see Chapter 5). Although the Ship's Company were aware that I was collecting relational data and that the research concerned team performance, this did not differ significantly from my role as a sea-rider which incorporated assessment of performance and information handling concerning morale and team cohesion among other things. Therefore my additional role as a researcher would have been largely invisible.

### 6.2.3 Data analysis

The relational data collected in the Falkland Islands were used to construct a socio-matrix in the same manner as Project 2. With two crews, eight matrices were required to accommodate all four dimensions. Using the statistical programming language R the prestige variables were extracted. In addition the diameter of the networks were measured and the connectivity of nodes assessed using *igraph*. This is a different procedure to that used in Project 2 since information pertaining to possible information paths in the network was also required. A number of methods exist within *igraph* to describe networks (Kolaczyk and Csárdi, 2014) using R, and these were adopted. The sociograms and sociomatrices are included in Appendix C. A description of the networks is included in the Results section of this chapter.

154 information pathways were collected during the data collection described (above). This information was entered in a spreadsheet along with prestige variables for individuals in the information pathway, and a brief description of the information concerned. This dataset can be found at Appendix C.

A logistic regression was conducted due to the dichotomous nature of the output variable. The odds-ratios of success, due to the prestige of actors passing information, was assessed for each dimension. The results are described in the next section.

## 6.3 Results

### 6.3.1 Introduction

The data were subject to logistic regressions to determine the role of prestige in information transmission. This section will describe the data before summarising the results of the regressions.

### 6.3.2 Summary of network data

In total eight sociograms were collected: four graphs for each crew. All of the graphs were simple directed graphs (Wasserman and Faust, 1994; Kolaczyk and Csárdi, 2014). The diameter of a graph is defined as the longest distance created by paths between the vertices of that graph (Kolaczyk and Csárdi, 2014: 24). The diameter varied between three and seven nodes in the sociograms, indicating the longest possible path lengths for these graphs. Generally larger diameters were recorded for professional and social networks, and this appeared to be coincident with the number of edges or ties which were larger for these types of networks. Broadly speaking, the professional and social networks were more dense and connected than the other networks. Most of the graphs were fully connected with the exception of the professional and personal networks for the first crew I studied. These networks featured a single isolate who had no ties with the remaining network. A summary of the network statistics is given at Table 6.1. The sociograms can be seen at Appendix C.

Crew	Dimension	Fully connected?	Edges	Diameter
OPV 1	Professional	No	217	7
OPV 1	Personal	No	143	3
OPV 1	Sports	Yes	152	4
OPV 1	Social	Yes	320	5
OPV 2	Professional	Yes	207	5
OPV 2	Personal	Yes	175	5
OPV 2	Sports	Yes	172	6
OPV 2	Social	Yes	333	4

Table 6.1: Summary of sociogram properties

### 6.3.3 Summary of independent variables

In order to compare the prestige effects of the whole transmission chain, the transmitting and receiving node values were used. A combined prestige (the mean of the two nodes) was also used. Table 6.3 summarizes the independent variables:

The prestige values are lower than for the MCMVs used in Project 2. Speculatively, this may reflect the commonly held opinion in the RN that the OPVs have less tightly bound teams. The reasons for this are thought to be caused by the modern design of the Ship, featuring cabins instead of communal sleeping accommodation. The availability of two or one person cabins is also thought to weaken team cohesion as individuals can choose to spend time alone or in pairs, rather than in communal areas. Despite this speculation these vessels show no particular weaknesses when on Operational Sea Training. The aim of this project was to assess the effect of prestige on information transmission and not to assess whole team performance, so the effect of the lower average prestige on team performance was not assessed. The OPVs have, in any case, a more simple mission than

Variable	Mean	SD
Professional Prestige (T)	0.19	0.14
Professional Prestige (R)	0.20	0.17
Professional Prestige ( $\mu$ )	0.19	0.12
Personal Prestige (T)	0.12	0.87
Personal Prestige (R)	0.12	0.73
Personal Prestige ( $\mu$ )	0.12	0.01
Sports Prestige (T)	0.10	0.03
Sports Prestige (R)	0.10	0.04
Sports Prestige ( $\mu$ )	0.10	0.03
Social Prestige(T)	0.18	0.10
Social Prestige (R)	0.21	0.10
Social Prestige ( $\mu$ )	0.19	0.12

Table 6.2: Summary of independent variables

Table 6.3: T = Transmitter, R = Receiver

the MCMVs making the comparison unsound.

As happened in Project 2, professional prestige has a relatively high value, although this time social prestige is equal. While social prestige was not equal to professional prestige in the earlier project it was ranked in second place. Also analogous to Project 2, personal and then sports prestige follow the other variables in value. Therefore the pattern is similar to the MCMV prestige profile but significantly lower. The graph at Figure 6.3 illustrates this.



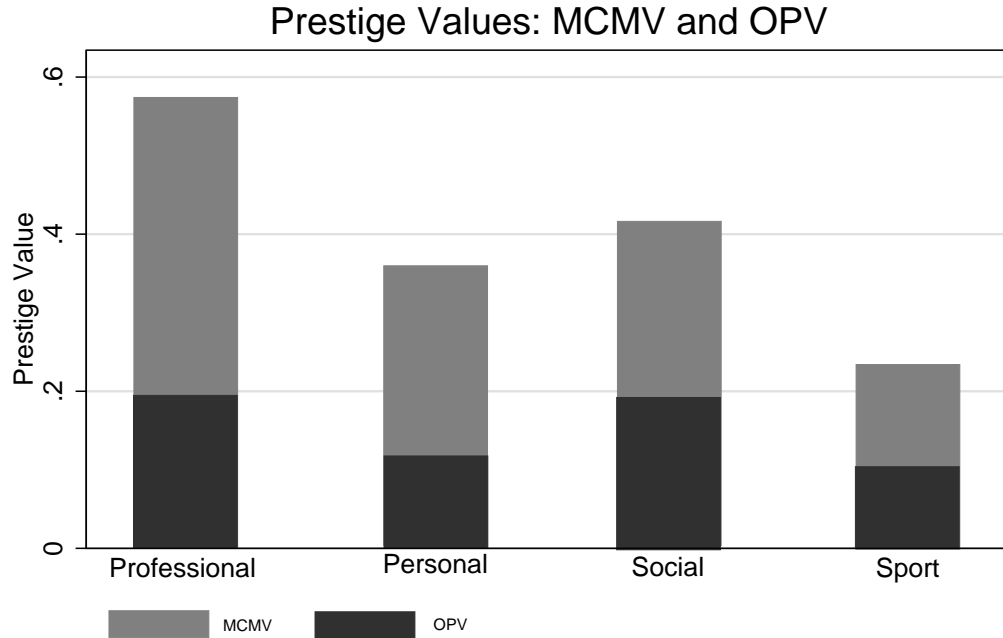


Figure 6.3: Mean prestige values compared between the Mine Counter Measures Vessels (MCMV) in Project 2 and the Offshore Patrol Vessels (OPV) in Project 3.

#### 6.3.4 Formal and informal leadership

As in Project 2, it is necessary to analyse the influence of informal and formal leadership, defined as prestige and rank respectively. The potential overlap of the definitions may lead to formal leadership being unwittingly allowed to influence the results. As before I define prestige as “freely conferred deference” (Henrich and Gil-White, 2001). Using in-degree is a useful approximation of deference, especially in advice networks, given the focus on information and social learning in this project. Rank is an easy to measure indication of status in a military environment. A correlation of rank and prestige for all 78 participants is shown at Table 6.4.

The correlation between rank and prestige is far higher for advice networks in this sample. The negative correlation in participation networks is also stronger. Both samples are similar, qualitatively speaking, as both feature small tight-knit crews working in extreme environments. The most striking difference between the two crews, however, is the time spent together. The crew in Project 3 are formed solely for six months at a time, whereas the crews in Project 2 may spend a number of years together, despite there being a considerable movement in and out of the group. These movements are only of a few people or single persons at a time. The crew change in HMS Clyde, however, is wholesale and these surveys were conducted very early in their deployment. Therefore informal networks have had less time to develop than for the crews in Project 2. This may also

Variable	Correlation with rank
Professional Prestige	0.744
Personal Prestige	0.647
Sports Prestige	-0.102
Social Prestige	-0.398

Table 6.4: Project 3: correlation of rank and prestige ( $N = 78$ )

explain the lower prestige scores across the board. Speculatively, this early stage of crew formation may explain the reliance on rank as major contributor to prestige. But the relationship between prestige and rank is not as straightforward as the correlations indicate. The box plot at Figure 6.4 shows that although a linear relationship between professional prestige and rank can be seen, the variance is very high and for the higher ranks the data is not clear. As expected from the correlation matrix, there is no discernible relationship for the participation networks.

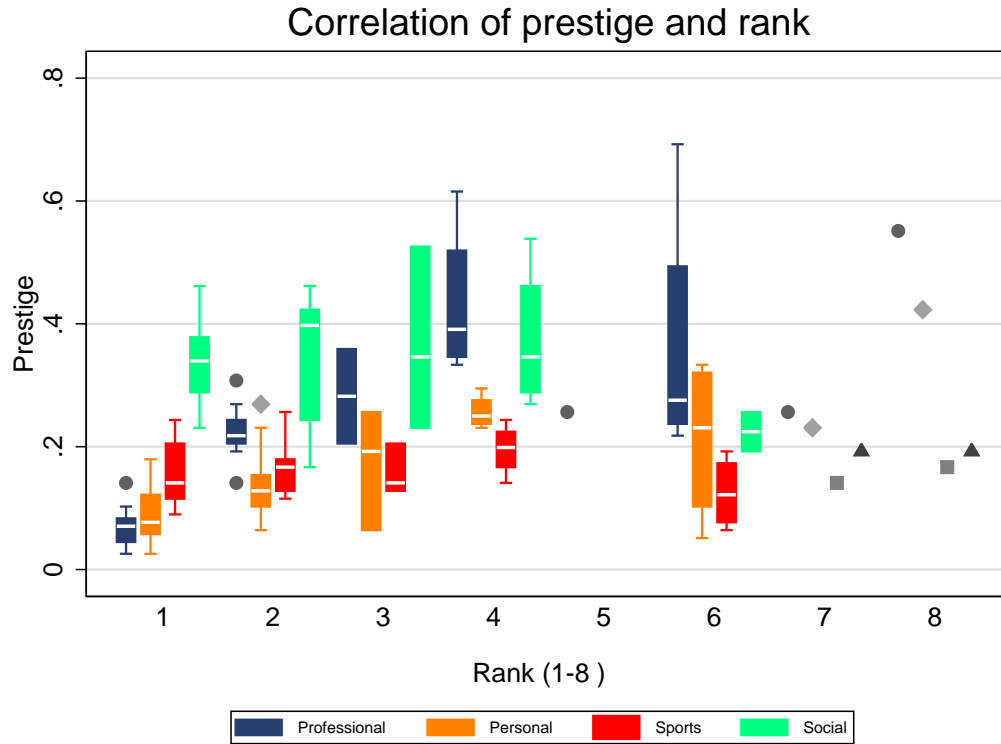


Figure 6.4: Prestige and rank correlation - Project 3

A logistic regression comparing rank with the successful transmission of information demonstrated the influential power of rank ( $LR\chi = 37.33, p \geq \chi^2 = 0.000, PsuedoR^2 = 0.1749, N = 154$ ).

The regression statistics are shown at Table 6.5. The regression considers the rank of the person passing information and the receiver. The measure of variance ( $PseudoR^2$ ) is relatively low and the effect size, measured by the odds-ratio, is small. However it was necessary, unlike Project 2, to control for rank in the analysis of prestige.

Variable	Odds Ratio	$p \geq  z $
Rank (T)	1.405	0.000**
Rank (R)	1.240	0.035*

Table 6.5: The results of the logistic regression of successful information dissemination and rank.

\* $p \leq 0.05$ , \*\* $p \leq 0.01$ ,  $N = 154$

### 6.3.5 Results of the logistic regression

#### Rank

A multivariate regression of successful transmission, rank and the prestige variables for transmitter and receiver nodes was conducted, this resulted in an insignificant result for rank and all but Professional Prestige (transmitter). An attempt was also made to fit the prestige variables without rank. This is reported in the next section. Despite the evidence for rank as an analog for prestige its small effect size is diluted when added to other explanatory variables. The results of the regression are included within Table 6.6.

An attempt to fit rank with only one other variable (the significant independent variable: professional prestige (T)) failed to achieve a significant model ( $p \geq |z| = 0.201$ ,  $N = 154$ ). It was therefore considered that, although rank was more influential than for Project 2, that rank (on its own) was not as influential as informal prestige.

Variable	Odds Ratio	$p \geq  z $
Rank (T)	0.851	0.408
Rank (R)	1.213	0.381
Professional Prestige (T)	1.414	0.000**
Professional Prestige (R)	0.965	0.539
Personal Prestige (T)	1.051	0.783
Personal Prestige (R)	1.345	0.105
Sports Prestige (T)	1.17	0.509
Sports Prestige (R)	0.775	0.194
Social Prestige (T)	0.878	0.331
Social Prestige (R)	1.076	0.535

Table 6.6: The results of multivariate logistic regression of successful information dissemination and prestige variables, controlling for rank.

\* $p \leq 0.05$ , \*\* $p \leq 0.01$ ,  $N = 154$

### Multivariate regression

A multivariate logistic regression was conducted for all prestige variables. The model demonstrated significant results for Professional Prestige (T) and Personal Prestige (R) ( $LR\chi = 90.93$ ,  $p \geq |z| = 0.000$ ,  $PseudoR^2 = 0.426$ ,  $N = 154$ ). The results are shown at Table 6.7.

Variable	Odds Ratio	$p \geq  z $
Professional Prestige (transmitter (T))	1.400	0.000**
Professional Prestige (receiver (R))	0.974	0.618
Personal Prestige (T)	0.999	0.999
Personal Prestige (R)	1.422	0.029*
Sports Prestige (T)	1.189	0.461
Sports Prestige (R)	0.752	0.128
Social Prestige (T)	0.929	0.453
Social Prestige (R)	1.041	0.677

Table 6.7: The results of the multivariate logistic regression of successful information dissemination and prestige variables.

\* $p \leq 0.05$ , \*\* $p \leq 0.01$ ,  $N = 154$

Having identified that different individuals (transmitter and receiver) were implicated in professional and personal prestige supporting information transmission, I decided to model the effects

of the mean prestige of both receiver and transmitter, given at Equation 6.1 . The results of this regression are given in Table 6.8. On this occasion professional prestige failed to achieve significance, although both personal and sports networks proved influential ( $LR\chi = 71.25, p \geq \chi^2 = 0.000, PseudoR^2 = 0.333, N = 154$ ). The Sports Prestige result has an odds ratio of only 0.585 suggesting an inverse relationship with Sports Prestige. It was possible to eliminate this rather dubious result by fitting a model incorporating the three significant regressions (Professional Prestige (T), Personal Prestige ( $\mu$ ) and Sport Prestige ( $\mu$ )). Using this model , Sport Prestige failed to achieve significance and its removal from the model led to an increase in the  $LR\chi$  and  $PseudoR^2$  scores.

$$Prestige(\mu) = \frac{Prestige(T) + Prestige(R)}{2} \quad (6.1)$$

Variable	Odds Ratio	$p \geq  z $
Professional Prestige (mean ( $\mu$ ))	1.131	0.137
Personal Prestige ( $\mu$ )	1.749	0.004**
Sports Prestige ( $\mu$ )	0.585	0.026*
Social Prestige ( $\mu$ )	1.058	0.619

Table 6.8: The results of the multivariate logistic regression of successful information dissemination and mean prestige variables.

\* $p \leq 0.05$ , \*\*  $p \leq 0.01$ ,  $N = 154$

Finally, a multivariate regression was developed using the successful variables. This regression is reported at Table 6.9 and supports the independent variables Professional Prestige (T) and Personal Prestige ( $\mu$ ) ( $LR\chi = 87.24$ ,  $p \geq \chi^2 = 0.000$ ,  $PseudoR^2 = 0.4087$ ,  $N = 154$ ). This model was also run whilst controlling for rank (see Table 6.10). The regression demonstrated significance for the prestige variables and rank remained insignificant ( $LR\chi = 86.39$ ,  $p \geq \chi^2 = 0.000$ ,  $PseudoR^2 = 0.4047$ ,  $N = 154$ ).

Variable	Odds Ratio	$p \geq  z $
Professional Prestige (T)	1.294	0.000**
Personal Prestige ( $\mu$ )	1.389	0.004**

Table 6.9: The effect of professional and personal advice on the dissemination of information

\* $p \leq 0.05$ , \*\*  $p \leq 0.01$ ,  $N = 154$

Variable	Odds Ratio	$p \geq  z $
Rank	0.977	0.854
Professional Prestige (T)	1.296	0.000**
Personal Prestige ( $\mu$ )	1.406	0.010*

Table 6.10: The effect of professional and personal advice on the dissemination of information, controlling for rank

\* $p \leq 0.05$ , \*\*  $p \leq 0.01$ ,  $N = 154$

## Univariate regressions

In order to investigate the effects of the prestige variables singly univariate regressions were conducted. The results of the regression of each prestige variable are given in Table 6.11.

Variable	Coefficient	$p \geq  z $	$LR\chi^2$	Pseudo $R^2$
Professional Prestige:				
Transmitter	12.824	0.000**	77.65	0.364
Receiver	3.411	0.001**	11.07	0.052
Mean	13.418	0.000**	60.88	0.285
Personal Prestige:				
Transmitter	17.528	0.000**	55.87	0.262
Receiver	10.262	0.000**	18.97	0.089
Mean	22.779	0.000**	55.67	0.261
Sports Prestige:				
Transmitter	0.801	0.842	0.04	0.000
Receiver	-4.215	0.267	1.23	0.006
Mean	-3.076	0.542	0.37	0.002
Social Prestige:				
Transmitter	0.213	0.937	0.01	0.000
Receiver	-1.129	0.641	0.22	0.001
Mean	-1.015	0.773	0.08	0.001

Table 6.11: Summary of logistic regressions of successful information transmission and independent variables (\*\*  $p \leq 0.01$ )

Only advice networks demonstrate a significant correlation with the dependent variable. Both professional and personal prestige demonstrate efficacy in the transmission of information. Neither participation networks achieves significance. Unlike Project 2 the coefficient, and not the odds-ratio, is displayed in the results table (Table 6.11). This is because the effect size described by using an odds ratio was too large to interpret. This is due to the normalised prestige value which ranges between zero and one. Because a logistic regression records the increase in odds ratio for a unit rise (Long and Freese, 2006: 178), the odds ratio is extremely sensitive. Therefore the coefficient was selected as a more useful parameter. The regression shows that personal advice networks have the largest effect size although as the following sections demonstrate professional prestige retains the best fit statistics. The prestige of the transmitter node has greater effect than the prestige of the receiver. However, information is passed most reliably by prestigious dyads.

The results show that for dyads:

Predicted logit of successful transmission =  $-2.615 + (13.418) X$  Professional Prestige [H1]

Predicted logit of successful transmission =  $-2.000 + (22.779) X$  Personal Prestige [H2]

Unlike Project 2 there is no requirement for a lengthy discussion of confounding variables (see Chapter 5). Because I have isolated the outcome variable from the wider task of successfully completing a complex training serial, issues such as temporal considerations and density are removed from consideration. The dependent variable is simple (transmission of information) and was observed directly. The following sections will therefore just look at the fit statistics for the model.

### 6.3.6 Evaluations of the logistic regressions

The following appraisal of the models are based on: (a) overall model evaluation, (b) statistical tests of individual predictors, (c) goodness of fit statistics, and (d) validations of predicted probabilities (Peng et al., 2002). As part of the model evaluation the decision to fit prestige variables individually was evaluated by resolving their independence. Table 6.12 records the independence of the variables.

#### Model evaluation

Table 6.12 shows correlation between the two significant independent variables: professional and personal prestige. The participation variables (sports and social) demonstrate independence but do not achieve statistical significance in the regression. However the variance inflation factor (VIF) analysis at Table 6.13 demonstrates no multicollinearity problems. These statistics support the use of a multivariate model based on advice networks, although the interaction between the two advice prestige variables requires further analysis using statistical and goodness-of-fit tests.

	Professional	Personal	Sports	Social
Professional	1.000			
Personal	0.809	1.000		
Sports	0.025	0.255	1.000	
Social	-0.022	-0.034	0.308	1.000

Table 6.12: Correlation of independent variables



Prestige variable	VIF	$\sqrt{VIF}$	Tolerance	$R^2$
Professional Prestige (T)	1.74	1.32	0.575	0.425
Personal Prestige ( $\mu$ )	1.74	1.32	0.575	0.425

Table 6.13: The variance inflation factor for the multivariate model

### Statistical tests

A likelihood ratio test gauges the improvement of these models over the intercept only model, following the advice of Peng et al. (2002). Table 6.14 shows the likelihood ratio (LR) tests for each prestige variable expressed as a  $\chi^2$  value.

Model	Likelihood Ratio Value
Multivariate	45.69
Professional Prestige	10.04
Personal Prestige	4.84

Table 6.14: Results of likelihood ratio tests of each predictor variable

The LR tests produce significant results. Professional prestige generates a higher  $\chi^2$  score ( $LR\chi^2 = 10.04$ ,  $df=1$ ,  $p < 0.01$ ). Personal prestige however still represents an improvement on the null model ( $LR\chi^2=4.84$ ,  $df=1$ ,  $p < 0.05$ ). The multivariate model has the highest LR score ( $LR\chi^2 = 45.69$ ,  $df = 2$ ,  $p < 0.01$ ) The statistical test of individual predictors suggested by Peng et al. (2002) is Wald's Chi Squared Test, the results of these tests are at Table 6.15.

Model	Wald's $\chi^2$	$p \geq \chi^2$
Multivariate	86.35	0.000
Professional Prestige	38.20	0.000
Personal Prestige	36.55	0.000

Table 6.15: Results of Wald's Chi Squared Test of individual predictors.

As with earlier tests the multivariate fits the data best but the other predictors are significant and achieve acceptable test values. The Wald's test suggests a good improvement for all models on the null model ( $p \leq 0.01$ ). Although both the Wald's and the LR tests are asymptotically equivalent it can be seen from Tables 6.14 and 6.15 that the results can differ greatly. Statistical theory is not clear which test is more suitable for logistic regression (Long and Freese, 2006: 145) but both test

yield significant results and suggest an improvement on the null model.

### Goodness of fit

The Hosmer-Lemeshow (H-L), which is a Pearson Chi-Squared statistic, was used to establish the goodness-of-fit. Perhaps counter-intuitively, an insignificant result allows the null hypothesis to be rejected, suggesting a tenable model fit to the data (Peng and So, 2002; Peng et al., 2002). Pseudo  $R^2$  statistics estimate the variance explained by the model, although these indices are not as reliable as for other regressions. Therefore they are used as supplementary tests (*Ibid.*). The test statistics are tabulated at Table 6.16 :

Independent Variable	H- L Statistic	$p \geq \chi^2$	$PseudoR^2$
Multivariate	71.92	0.575	0.404
Professional Prestige	3.31	0.209	0.285
Personal Prestige	11.43	0.179	0.261

Table 6.16: Results of Goodness-Of-Fit Tests of independent variables.

The H-L test was successful for both prestige variables and the multivariate model. Further investigation can be achieved using the lowess smoother curve which plots the observed cases that equal 1 at each level that the *model* predicts a 1 (Long and Freese, 2006: 157). The curves for both prestige values are shown at Figure 6.5.

The closer the dotted line to the diagonal, the better the fit (Long and Freese, 2006: 157)(*loc. cit.*). Both professional and personal prestige demonstrate goodness-of-fit although, in both cases, observed cases exceed prediction at the very highest prestige values. Professional prestige is a slightly poorer fit but both models demonstrate a very acceptable relationship between observed and predicted values. The multivariate model, conversely demonstrates poorer fit in the middle but is still an acceptable fit.

### Validation of predicted probabilities

As with Project 2 graphing prediction accuracy was used to predict probabilities from the logistic regressions (Peng and So, 2002). The graphs at Figures 6.6 and 6.7 demonstrate the degree to which predictions agree with the data using the receiver operating characteristic (ROC) curve.

The area under the curve is the critical measure of predictive validity (*Ibid.*). The ROC curve plots the proportions of events correctly classified (called sensitivity or true positive fraction) against 1 - misclassified events (called specificity or false positive fraction) (*Ibid.*). The model with the largest area under the curve is considered the best model. In both cases the area under the curve is large ( multivariate = 0.893, professional prestige = 0.847, personal prestige = 0.826).

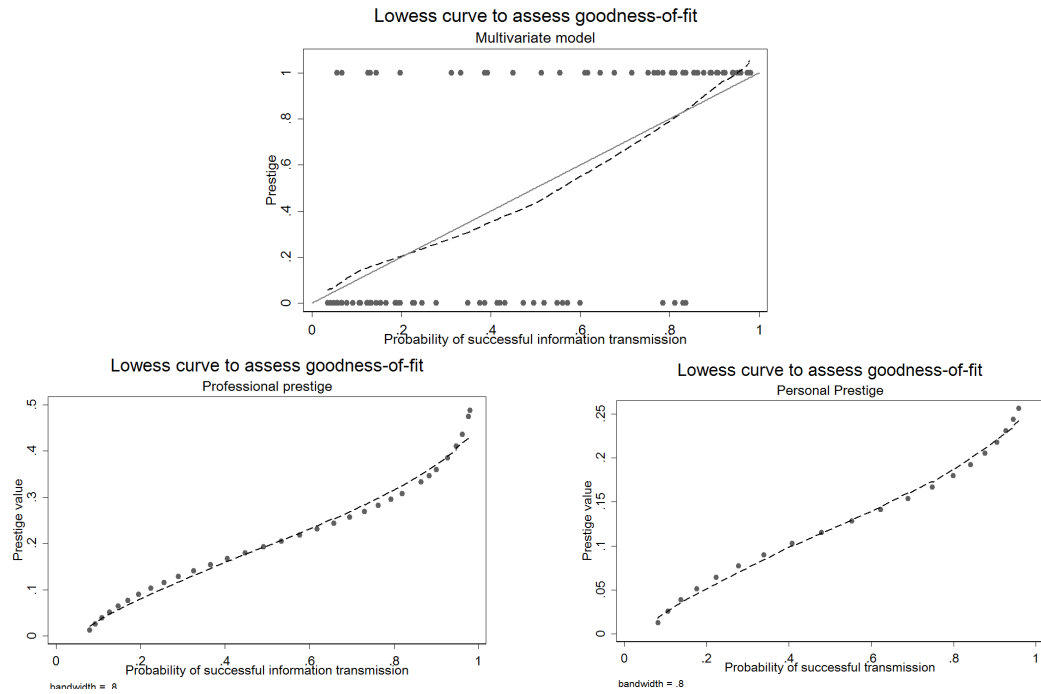


Figure 6.5: Lowess curves for professional and personal prestige.

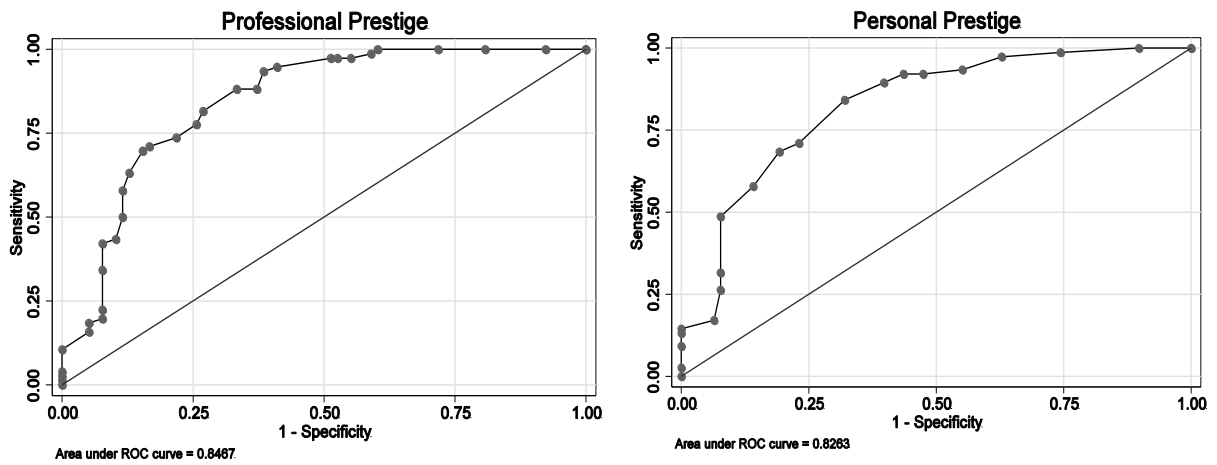


Figure 6.6: ROC curves for prestige variables.

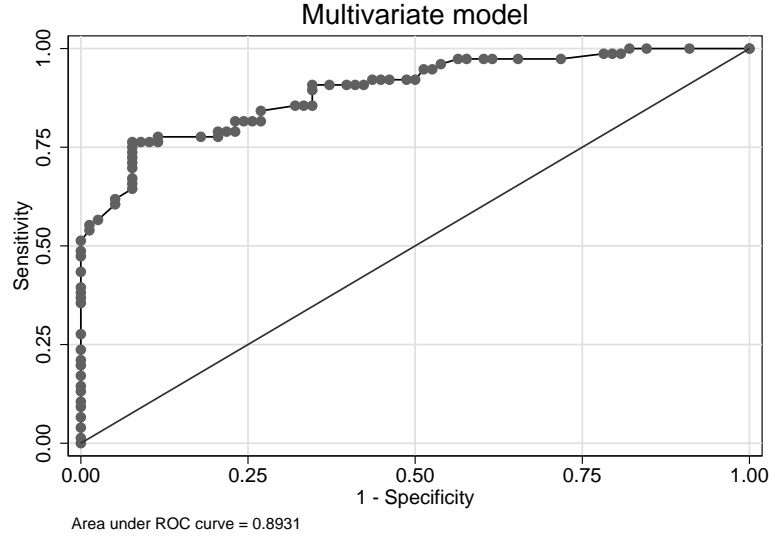


Figure 6.7: ROC curve for multivariate model.

Additionally classification tables can also be used to describe the validity of the logistic predictions (Peng et al., 2002), (Garson, 2014). The percentage of correct predictions made by the models is tabulated at Table 6.17:

Independent variable	Percentage correct
Multivariate	79.22
Professional Prestige	75.97
Personal Prestige	74.03

Table 6.17: Post-estimation classification table outputs.

In each case the predictive validity is above the normally accepted cut-off level of 0.5 (Peng et al., 2002), demonstrating the superiority of each model over the null model. In other words each model predicts at an accuracy significantly greater than chance. The percentage of correct classifications were also around 10 percent higher than the models analysed in Project 2.

Figure 6.8 shows the predicted probability of the successful transmission of information between dyads based on the mean prestige of the individuals concerned. The personal prestige curve is much steeper than the professional prestige curve reflecting the earlier results of the regression. This suggests a greater effect size for personal prestige than for professional prestige although both have large positive correlations. This result differs from Project 2 in that professional prestige demonstrated greater effect size in determining team performance. In terms of information transmission however it appears that personal prestige has greater effect. The results for personal prestige indicate a very low probability of transmission unless some degree of personal prestige exists. Also only a modest level of personal prestige increases the probability significantly. This is suggestive of a threshold

level of prestige which allows information transmission to take place. This could be analogous to trust, where only a low level is required unless the information is sensitive. Professional prestige, on the other hand, shows a graduated effect: greater prestige predicts a higher probability of successful transmission. These dynamics are in need of further study.

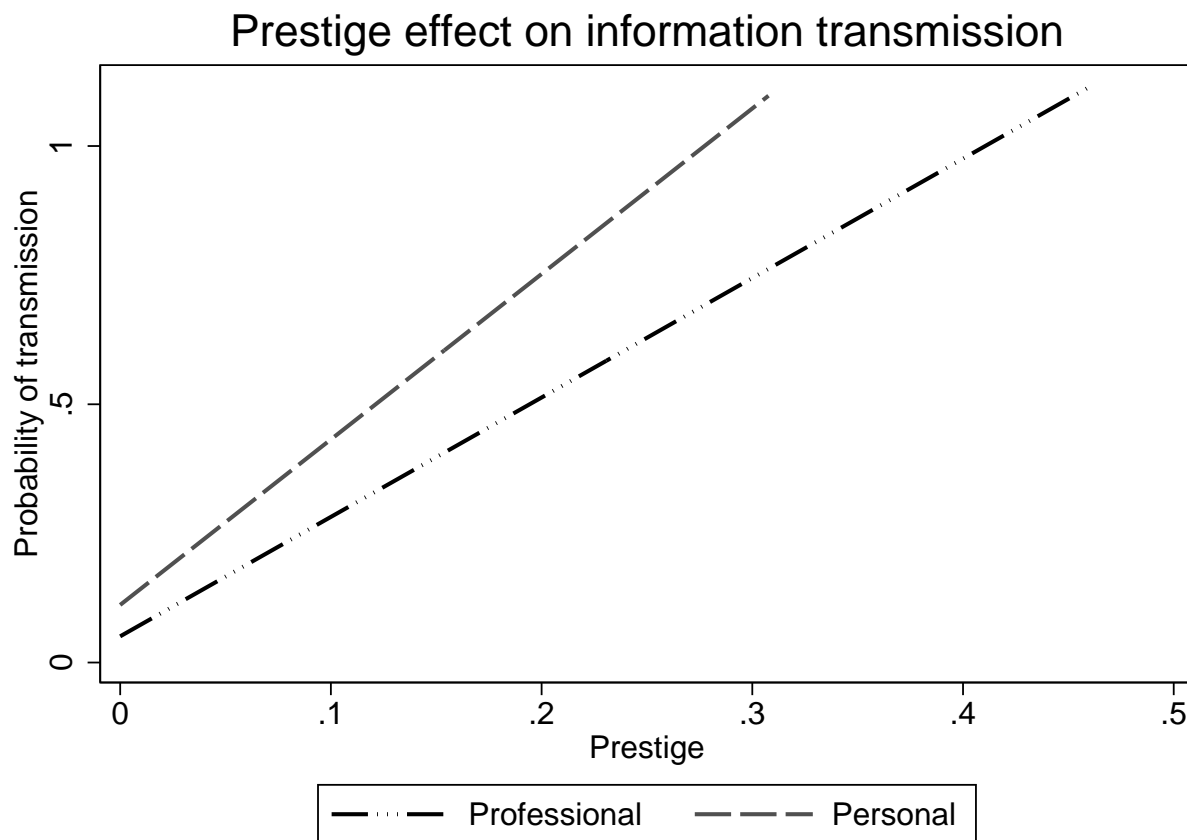


Figure 6.8: Probability of the successful transmission of information based on prestige

## 6.4 Discussion

The results demonstrate that informal advice networks exert a large effect on formal transmission networks. Professional and personal prestige within dyads especially create the best conditions for accurate transmission of information. This reflects an informal observation I made with both crews that information appeared to remain within groups of high prestige individuals. This resulted in lower prestige individuals retaining less operational information. I had expected high prestige individuals to act as a catalyst in percolating information throughout the network but it appears that they preferentially pass the information to other high prestige actors. This results in a prestige gradient such that difficulty is encountered in moving information from low to high prestige individuals.

Project 3 is multilevel study since the definition of prestige is group based (on the number of inward ties received by a group), although it concerns individuals, but the dependent variable is the result of a dyadic exchange. Therefore two levels of analysis are accounted for in the regressions as recommended for modern leadership studies (Yammarino and Dansereau, 2011).

Another observation I made with both crews was that the lower prestige individuals appeared to be ignorant of both informal information, passed between higher prestige individuals, and public information transmitted on the public address system. This suggests that these individuals considered such information as unnecessary since they were largely ignoring it. There is a sense that these individuals are disengaged from effort being conducted on behalf of the Command. This reflection supports the findings of Project 1 and Offord et al. (2016) where it was observed that poor interaction may result in disengagement.

The findings also support the notion that high prestige leads to an “unthinking acceptance” of an actor as a reliable source of information while low-prestige sources are rejected with little consideration of the actual content (Asch, 1948; Greenfield and Kuznicki, 1975). Although Asch specifically considered imitation rather than passing on information it can be seen that the process and bias inherent with prestige variables are identical. Evolutionary researchers, Henrich and Boyd (1998) have suggested that the psychological mechanisms for conformism have developed alongside cultural requirements for social learning (i.e. they are co-evolutionary). Although they do not discuss prestige bias explicitly, Henrich and Gil-White (2001) do so later. This research shows prestige bias in action. Because credible individuals offer a good opportunity for beneficial imitation at low cost, prestige bias is considered as a pay-off biased method of social learning by gene-culture co-evolutionary researchers (e.g. (McElreath et al., 2008; Kendal et al., 2009)).

The construction of the prestige bias was different to that used in many evolutionary approaches where ethological techniques are used (e.g. Atkisson et al. (2012); Chudek et al. (2012)). These techniques rely on the observation of gazes directed towards individuals and have been shown to reliable indicators of prestige (Atkisson et al., 2012). However, my specific enquiry included four dimensions of prestige which cannot be accounted for by using direct observation. The questionnaire was structured to account for these dimensions and also create a useful measurement of prestige. The results concur with evolutionary approaches such as Atkisson et al. (2012); Chudek et al. (2012) in confirming a prestige bias in social transmission but, additionally, define the bias as centred on advice networks. Chudek et al. (2012) discovered that prestige biases can indeed enhance the fitness of cultural learners, as predicted by culture-gene coevolutionary approaches. They also stated

that the bias was “domain specific” since their subjects applied the bias in specific contexts (*Ibid.*). This domain preference can be clearly seen in my results since only advice networks are effective in information transmission. The role of professional and personal credibility in assessing operational information is linked with a notion of wisdom or experience in this case.

As indicated by Chudek et al. (2012) and Henrich and Gil-White (2001) prestige indicates the best models to copy from. Advice networks appear to be excellent indicators of the best models in an operational context. Professional prestige clearly signposts reliable information which is relevant to the specific situation (e.g. machinery states, repair solutions, medical guidance). Personal prestige indicates not only life experience but also judgement and approachability. Judgement in a complex operational situation could include moral issues (e.g. prioritising casualties) while approachability could indicate altruism i.e. the individual can be trusted to offer advice for the good of the team and not withhold it. The difference between the way each of these networks operate indicates the nature of these two types of prestige. Professional prestige appears to be more influential in the source of information (the transmitter) suggesting these individuals are accepted as reliable sources of information. Personal prestige was significant for both transmitters and receivers but receivers demonstrated the largest effect size. This shows that personal prestige is somewhat more akin to trust in that it is more important that the receiver is seen as reliable. These observations create a domain specific framework for understanding prestige biases.

Prestige is often suggested as a modern proxy for dominance and social rank (Barkow et al., 1975). The proximity of actual rank and prestige can be clearly seen in the sociograms. Figure 6.2 shows that generally higher-prestige nodes (indicated by large circles) tend to be officers or senior rates. In the Project 3 population rank was more highly correlated with rank than for Project 2. Rank was also shown to a predictor of successful information transmission. This suggests that rank is more influential in this population. I speculated that this may due to the early stage of team formation for this group; since informal bonds have not yet fully developed, rank is a more reliable indicator of prestige. Longitudinal network studies could be used to investigate this phenomenon in more depth.

However, there are instances of low prestige officers and higher- prestige but lower ranked actors. The assessment of rank and prestige correlation in Figure 6.4 also shows that rank and prestige are not always analogous, even in advice networks. Controlling for rank showed that the emergence of informal leadership structures have the potential to influence information transmission to a greater extent than rank alone (accepting that the prestige score is likely to be influenced by rank). These deviations from the rule suggest that whereas prestige may have evolved to fill the cultural niche once occupied by dominance (Barkow et al., 1975), it varies from the formal rank structure. Thus information may be passed through the informal network along different paths to those expected from the formal structure. This strongly agrees with the statement made by Henrich and Gil-White (2001) that prestige is an alternative to dominance to achieve status.

As stated in the introduction, these findings add some detail to the *proximal predictors* of leadership outcomes described in trait-process theories (e.g. (Antonakis et al., 2012; Dinh and Lord, 2012)). A weakness of these theories is that the process of leadership itself has been something of a mystery prompting it to be called a *Black Box* by (Casimir et al., 2014). While many processes

remain a mystery, it can be seen in this context that prestige certainly plays a role in influencing outcomes. Furthermore, I have developed the role of prestige from a *distal predictor* (Antonakis et al., 2012): a competence named *interact*. Leaders in the RN are selected on the basis of competencies including *interact* (Young and Dulewicz, 2005, 2006, 2008, 2009). This competence allows leaders to develop prestige despite followers' ambivalence to leadership (Boehm, 1993) and resistance. Advice networks based on experience and knowledge must be built up slowly suggesting a gradual social consensus on prestige by *prestige givers* (Barkow et al., 1975). Where information transmission is vital for success, prestigious leaders are more likely to prevail due to this gradual accumulation of prestige rather than a heroic seizing of authority.

The lack of effect for participation networks demonstrates that it is not just prestige but very specific forms of prestige which count (i.e. it is *domain specific* (Chudek et al., 2012)). Since the outcome variable was information, advice networks seem ideally placed to provide the correct *domain specific* form of prestige. Additionally the role of participation networks appears to be to counter levelling activity by followers (see Chapter 5), which does not account for the outcomes of the observations in this project. Possibly prestige in the participation networks accounts for a general index of team cohesion which cannot be measured by specific interactions. It is difficult to substantiate the effect of levelling or prestige specifically designed to counter levelling. This is because levelling is mostly covert (see Chapter 5 and Offord et al. (2016)). However during the second visit to HMS Clyde I observed, on numerous occasions, a senior but low-prestige individual being ignored or flatly refused when giving instructions. Project 1 suggests that participation networks could act to counter this sort of, admittedly rare, behaviour.

## 6.5 Conclusions

This project has sought to discover the mechanisms responsible for the improvement in team performance caused by leaders with high prestige discovered in Chapters 4 and 5. Unlike many co-evolutionary approaches to prestige, I have sought to discover the role of specific types of prestige namely the four dimensions described earlier. The regression demonstrates a large positive effect on information transmission by a combination of professional and personal prestige. However, prestige in sports and social networks achieved no significance. Because Project 1 indicated these participation networks were responsible for countering levelling activity (see Chapter 5), it is likely that these activities are covert and not measurable by this particular methodology.

Further research in the domain of levelling and resistance would be of benefit to leadership studies and studies of team cohesion. The clear relationship between prestige in advice networks and information transmission highlights how a competence (*interact*), largely attributed to individual differences, develops prestige and plays a *domain specific* role in leadership outcomes. It satisfies co-evolutionary approaches by substantiating prestige bias and the fact that is contextual. It also maps a complete leadership trait-process in a specific context.



## Chapter 7

# Discussion: A development of focal theory using computer simulation.

*Leadership should not be treated as a separate subject. Leadership should be treated as something intrinsic to the work that you're doing so you can show leadership in all sorts of different ways*

(Brigadier Bill Dunham Royal Marines (St George, 2012: 44))

### Overview

*In this chapter I will discuss the consequences of Projects 1, 2 and 3; and the use of computer simulation to demonstrate the emergence of group outcomes from dyadic interactions. Using the trait process model I will outline the contribution of each project to each stage of the leadership process. This will culminate in a leadership interaction model which incorporates the findings of all three projects. The interpretive frameworks developed in each of the preceding chapters are also discussed. Because multi-level analyses are vital in understanding leadership processes I will conclude this chapter with a discussion of a computer simulation which illustrates the effect of individual prestige on group behaviour*

### 7.1 Introduction

My research centred on the investigation of leadership processes, specifically leader-follower interaction. I adopted a mixed methods framework to interpret my data and pursue my research questions. The purpose of using qualitative and quantitative methods was to induce a leadership process based on interaction and then to test it. During the focus groups an initial leadership interaction model was described. Although the participants confirmed the vital role of information, they also felt strongly that participation in certain shared experiences constitutes good interaction. Ultimately I have derived a leader-follower interaction process model which explains how interaction processes operate at multiple levels of analysis (i.e. individuals, dyads and groups). Multi-level analysis has

been shown to overcome many of the analytical problems inherent in leadership studies (Lord et al., 2001).

In this discussion I will use the trait-process framework (Antonakis et al., 2012) to describe my findings. By working through the framework and using its elements as section headings, I will summarize the focal theory I have used at each stage of research. I will then describe the resulting model, which synthesises the results of all three projects. Finally I will use computer simulation to discuss and illustrate the research outcomes, using the example of information transmission in a group. Prior to this description I necessarily digress to describe the data theory supporting computational approaches to social science. The trait process model adapted to incorporate my findings is given at Figure 7.1. It may seem contradictory to use interactions within a model based primarily on leader differences (trait process models). This study attempts to discover the whole process including leader differences (the interact competence) and interaction (the leader-follower interaction model). Since the RN includes the interact competence for training and selection of leaders it is possible to assume that formal leaders have the interact competence.

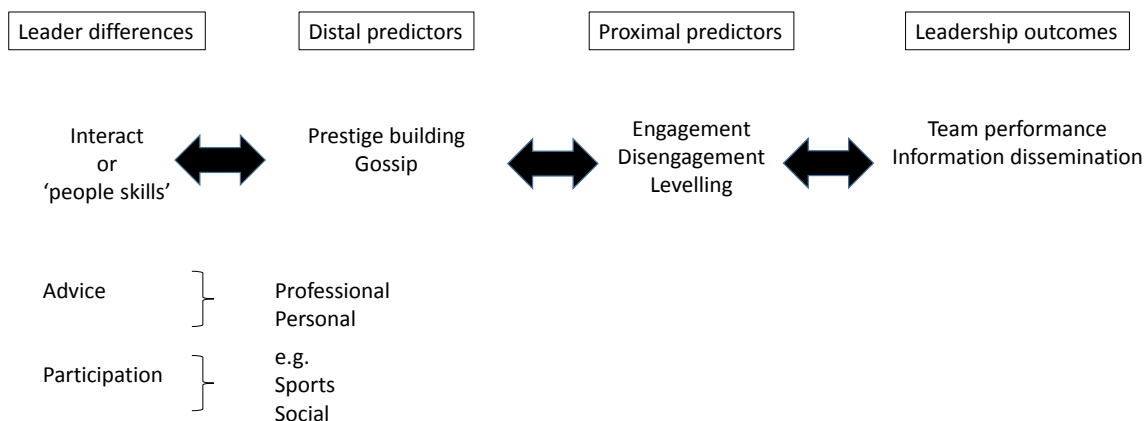


Figure 7.1: Leadership trait interaction model

## 7.2 Leader differences

Part I outlines the developments in leadership studies. These have been generally heroic in nature, emphasizing leader differences and down-playing follower responses to leadership. By overlooking the dynamics between leaders and followers, leadership scholars have been unable to describe lead-

ership processes fully: there has been a persistent research gap in this respect. Recently, this has led to a compensating increase in focus on post-heroic approaches. This adjustment includes an increasing interest in the processes of leadership from individual differences to leadership outcomes including the role of followers. This is also my point of departure from traditional leadership approaches. Using the Command Competence Framework as an example of a traditional approach to leadership, I sought to delve deeper into the process of interaction with followers. In doing so I adopted a post-heroic paradigm but I also used theories from anthropology, such as prestige-bias and cultural evolutionary approaches, as well as a more nuanced description of resistance to leadership. I focussed on interaction as a common thread for all of this theory. My research questions probe the background theory to develop a line of inquiry which departs from the foundational research:

1. What modes of interaction are most effective in leadership emergence?
2. What modes of interaction are most likely to improve team performance?
3. How do effective modes of interaction actually lead to better teamwork?

I selected the *interact* competence from the Command Competence Framework (CCF). The reasons for selecting the CCF, and interact specifically, were explained in Chapter 2. In the RN the interact competence is known more commonly as *people skills*. I define interactive individuals as effective leaders (Young and Dulewicz, 2005, 2006, 2007, 2008, 2009). Therefore the model proposed is an example of a process from a specific competence. Other traits or competencies could have been selected. However, interaction is vital in any leadership process (Offord et al., 2016; Young and Dulewicz, 2009).

You'll find that on ...no matter what platform you are on. That's it...its really important to have like ...a lot of interaction (IFG 1)

Having confirmed the importance of interaction, a definition of interaction was needed. Returning to the research questions, I set out to discover if one or many types of interaction were needed. The significance of information transmission emerged early in the investigation of interaction dynamics (Project 1):

There has been incidences where I have been on live operations and like the other ABs [Able Seamen] are going 'round the ship..like 'well what are we actually doing here?' Because they don't understand the whole....Because no-one's come out and said 'this is what we're doing, this is what we are trying to achieve, this is what you'....not the whole but the individual as well, 'this is what you are contributing. But there's a lot of people just standing around saying 'what are we doing here?' Do you know it's like, its like when they do their job and it comes off and they are successful and nobody says, 'well you done this job to provide such and such towards the outcome of this.' So they are standing around saying, 'right well, what are we actually doing here?'(IFG1)

A more complete definition of interaction based on two modes and four dimensions is included in the next section.

### 7.3 Distal predictors

Project 1 served to outline out a leadership process based on interaction. The exploratory nature of the focus groups and the use of recursive techniques allowed focal theory to emerge from the data. In this case I did not discover any new phenomena but developed an original synthesis of current theory: engagement, disengagement and resistance. Resistance is an impoverished area in leadership studies (Collinson, 2012), so I augmented it with social levelling theories from anthropology to create a more complete and nuanced concept of resistance (Boehm and Flack, 2010; Boehm, 2001, 1993; Eerkens et al., 2009). Also the value of prestige in the cultural transmission of knowledge emerged as key distal predictor (Henrich and Gil-White, 2001; Mesoudi, 2008).

The emergence of prestige did not completely centre on information. Two modes of interaction were developed: advice and participation networks. Although advice networks based on professional and personal prestige were channels of social information, participation networks were not. Participation networks were described as more numerous than the two types of advice network: they incorporated any activity where leaders participated by temporarily suspending hierarchical constraints. For example, an officer playing football with ratings would not expect to be addressed as ‘sir’. The most popular participation networks were sports and social activities but mundane activities on board such as “storing ship” were also mentioned. The role of these activities is supposed to be self-levelling, which enables leaders to avoid levelling behaviours:

Yeah, as well as having to take orders off of people who are above you and if you are living with them constantly, which you are. It’s obviously good to spend time with them on a social level where its a kinda level playing field. (IFG5)

Another distal predictor appeared to be the power of gossip to form a group consensus of leaders’ traits. Gossip was mentioned by all of the junior rates in the focus groups. Gossip is a means of social levelling in most anthropological accounts of group leadership and also in evolutionary leadership theory (e.g. Boehm (1993); Van Vugt and Ahuja (2010)). Gossip is often a pre-cursor for more serious forms of levelling. For this reason I have separated gossip from other forms of levelling and placed it among distal predictors.

“Basically you’re sniping behind their back.”

“Yeah, basically. Talking behind their back with ‘He told me to do this..’ and so on and so forth.”(IFG5)

Information dissemination plays a large part throughout the prestige building process. In the form of gossip it directly impacts prestige scores which affect the informal social structure. At the proximal stage, information is used in many forms of levelling. Focus group participants eagerly told me about how they played with information, either for fun or to short cut formal methods of information management. This behaviour was also discussed by Sonnenwald and Pierce (2000), who discovered that US Army personnel used information in Command and Control (C2) to their own advantage whilst at the same time appearing to contribute to command objectives. This was called *contested collaboration* (*Ibid.*). A very similar process appears at all stages of the leadership process, and it appears to be natural behaviour (i.e. not peculiar to military teams). Conversely,

the results of engagement in military teams were described as *heedful interrelating* in a seminal study of aircraft carrier operations (Weick and Roberts, 1993). The quotes below demonstrate the use of rumours or short-cutting normal chains of command:

Sailor 1: "I like the 2 deck rumours." [laughter]  
Moderator: "You quite enjoy generating the odd buzz [rumour]?"  
Sailor1: "States trip." [laughter]  
Sailor2: "We're going to Florida [laughter]."  
Sailor3: "See how fast it gets back to us, eh?[laughter]" (IFG5)

"I find a lot of them, they won't use the Divisional System the other way around. That's how a lot of information gets out, myself and [name omitted] are QM's [Quartermasters] and we'll be on the bridge, they seem to forget you're there so you're overhearing a phone conversation so you're like, 'What's he on about there? Going to sea on the 16th?' And suddenly the whole programme is being discussed by an AB [Able Seaman]telling what he's heard to a PO [Petty Officer]."(IFG4)

Unlike the trait process described by Antonakis et al. (2012) I have placed the prestige building process at the distal stage rather than proximal to leadership outcomes. This is because the process described by Project 1 was mundane and took place over a long periods of time. The participants described everyday activities as predicted by Karp (2013) which took place away from the major events in a ship's life. That is, the sailors described a gradual process of prestige building and leadership assessment which resulted from normal interactions. The efficacy of this team building was most likely to be tested when it was proximal to leadership outcomes. Gossip and other information based behaviour formed the major part of these activities. Proximal predictors may also be mundane. For example, resistance in this context is covert and therefore not likely to be demonstrative. However, behaviour at the distal stage shapes the group consensus of leader prestige over time. At the proximal stage these valuations shape behaviour which impacts directly on task outcomes.

## 7.4 Proximal predictors

Project 2 tested the hypothesis that team performance would be affected by prestige networks in the four dimensions indicated in Project 1. The analysis was aided by the meticulous recording of team performance which occurs when ships are engaged in sea training. Sea training is also an extreme activity featuring high tempo operations in difficult and challenging conditions, a true test of team performance. Project 1 predicted that teams with well established prestige networks would be engaged and perform at a higher level. Otherwise team members may be disengaged or even resist leadership.

**Heedful interrelating (engagement):** "Everyone's just going for it..you know what I mean. [mumbles] I'm trying to explain like but it is like everyone's pulling in one direction[mumbling] one in, all in." (IFG4)

**Contested collaboration (disengagement):** “If there is a formal boundary up all the time. You’re thinking ’Oh God! This is pounding my head in. What am I going to do? Because I can’t approach this person, they are not approachable.’ ” (IFGS1)

**Contested collaboration (levelling):** “Unless the actual requirement was written, unless someone in my department needs it and I’d do it if it was a requirement. But if one of the hierarchy asked me to do something I just won’t do it [laughs]. I mean if was completely against naval, if it was a command, if they say do something, you do it. But I just hated them so much , I just say ‘no’. ” (IFG 2)

Information, again, plays a key role at this stage. The example below shows how ignorance can be feigned when leadership behaviours fail to engage followers:

“Do you know it’s like, its like when they do their job and it comes off and they are successful and nobody says, ‘well you done this job to provide such and such towards the outcome of this.’ So they are standing around saying, ‘right well, what are we actually doing here?’ ”(IFG1)

Project 1 provided detailed data which helped to outline the leadership process. This highlights the value of the mixed methods approach. Projects 2 and 3 supported this model empirically but are necessarily focussed on leadership outcomes. Although much of the evidence for the process was obtained from focus groups, I also observed examples of levelling behaviour first hand during project 3. For example, I witnessed a relatively high ranking individual who was repeatedly ignored or defied by lower ranking but more prestigious individuals.

The processes described in both the distal and proximal phases of the leadership process appear similar. This may be why the models described by trait-process approaches group this activity in one area (e.g. Antonakis et al. (2012); Dinh and Lord (2012)). However, I discovered that interactions which occur an appreciable time before engaging in task focussed behaviour crucially build prestige and the “rules of engagement” for the teamwork which follows. The behaviour which occurs when conducting a task clearly differs from longer term prestige building because of the time constraints involved. But it is of basically the same character, which is to say it is based on the engagement, disengagement and levelling model described in Chapter 6 and shown at Figure 7.2.

The stages of the model illustrate a process of leader and follower behaviours which build the scenario for task behaviours at a later date. The interaction between leader differences and the distal stage (leader and follower behaviour) create a prestige network which will influence task behaviour (engagement, disengagement and levelling) and ultimately outcomes. For explanatory purposes the model has separate stages. In reality the stages are less distinct but the flow of prestige building into task behaviours is clear. An updated diagram of the proposed leadership process is at Figure 7.3

Although my model of leadership-interaction describes long term processes, some of the data collection was based on cross-sectional research design. The exploration of prestige building was collected qualitatively, relying on empirical methods to confirm the findings. The focus group participants reflected on their whole careers. Evidence from examples spanned many years and was

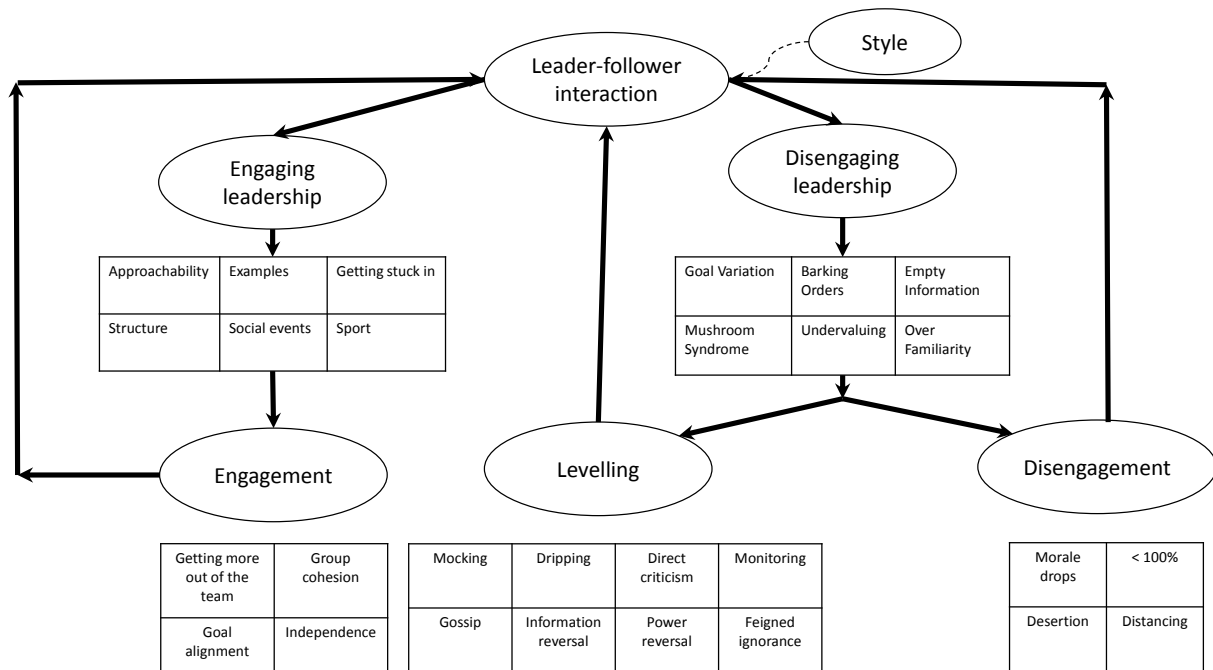


Figure 7.2: Leadership interaction model from Project 1.

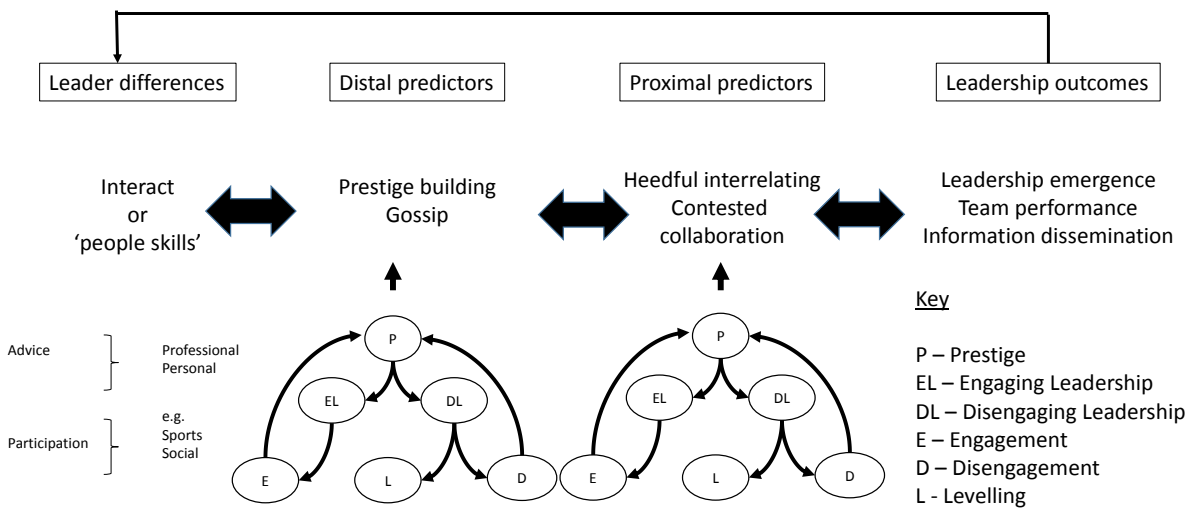


Figure 7.3: The leader-follower interaction process model

the result of accumulated experience. Although biased by individual dispositions the number of participants ensured a balanced reflection. Longitudinal methods relate to empirical techniques but Project 1 could be categorised as pseudo-longitudinal given that it induced longitudinal data. It was also important to ensure, since the next projects are cross-sectional, that the hypotheses are directly linked to this initial project. The four prestige networks described in Project 1 were transferred directly into the hypotheses for Project 2. Levelling as a covert activity was avoided for empirical measurement as this would have been very difficult to account for.

## 7.5 Leadership outcomes

Projects 2 and 3 aimed to verify that team performance is enhanced by interaction, which builds prestige along the lines described in Project 1. Project 1 built a strong case for the validity of the leadership interaction model because it was deeply grounded in the naval context. The empirical analysis was developed to test the reliability of the model by using reproducible methods to substantiate the claim that team performance would be enhanced by interaction. Whereas Project 1 data were heavily contextualised, team-working outcomes (Projects 2 and 3) are much more generalisable and can therefore be used to draw lessons about leadership and team work for many other contexts. The research questions varied between projects. In Project 2 the following hypotheses were tested:

1. H1: Leaders with high professional prestige will generate higher team performance.
2. H2: Leaders with high personal prestige will generate higher team performance.
3. H3: Leaders with high social prestige will generate higher team performance.
4. H4: Leaders with high sports prestige will generate higher team performance.
5. H5: Leaders with high prestige in *all* dimensions will generate higher team performance.

In project 3 the following hypotheses were tested:

1. H1: Individuals with high professional prestige are able to pass information through a social network with high fidelity.
2. H2: Individuals with high personal prestige are able to pass information through a social network with high fidelity.
3. H3: Individuals with high sports prestige are able to pass information through a social network with high fidelity.
4. H4: Individuals with high social prestige are able to pass information through a social network with high fidelity.

The difference between the research in these projects is simply that the priority for project 2 was to verify the findings of the earlier inductive model using a positivist approach. The final project



took account of the significant role of information in the interaction model. The priority was to discover *how* information was used in leadership outcomes. Prestige-bias theories (e.g. Henrich and Gil-White (2001)) suggest that prestige actually moderates information exchange. In a C2 context, information is critical to task outcomes, so testing the theory in this context was a sensible approach.

In Project 2, all five hypotheses were empirically supported. In Project 3, however, only the advice networks (H1 and H2) demonstrated statistically significant relationships with the dependent variable. It had already been established that participation supports team cohesion in a broader sense and was not information specific. These results allowed me to substantiate the final part of the interaction process model: leadership outcomes.

Because the final two projects are cross-sectional the direction of causality must be addressed. It could be argued that a high performing team will grant prestige to leaders. This seems especially likely in the case of professional prestige. But it could equally be argued that high performing teams experience a degree of team-bonding through their professional activity and this may result in participating in other activities together (e.g. sports or socialising). However, the study context provides robust reassurance that these considerations have not affected the statistical outcomes. In both contexts (Minehunters and the Falkland Islands Patrol Vessel) there is a constant rotation of crews. As each crew joins a vessel it must engage in what is called a “generation process”. This process reflects the fact that while, the crew are all individually trained, they are not collectively trained. That is, they are inexperienced in working together. The sea training used to derive the dependent variables is very early in that process. In fact, in all cases it is the first time the crew will have worked together under such arduous conditions, if at all. There cannot be, in this context, any previous team-bonding resulting from challenging professional conditions. Had there been any such situation, it could be argued that the performance of the team influenced prestige and not the other way around.

## 7.6 Conclusions for focal theory

The leadership-interaction process model was described in Project 1 and the outcomes were supported empirically by the later projects. Although much of the description of the model has come from a single project, the importance of the other two studies, which cannot be understated, is to verify that model. Therefore the leadership-interaction model has not changed: it has been upheld by the empirical analysis. However, it became clear in this discussion that the process of engagement, disengagement and levelling is a constant cycle of behaviour in all stages of the leadership process (as shown at Figure 7.3). This observation led me to modify the leadership process model by incorporating this cycle of behaviour at both stages and redefining the proximal predictors. The proximal predictors are summarised from other studies of military teamwork: *contested collaboration* (Sonnenwald and Pierce, 2000) and *heedful interrelating* (Weick and Roberts, 1993).

The model demonstrates that the process of engagement, disengagement and levelling occurs not just at the proximal stage but at all points during the process. Therefore I have placed the cycle of prestige building at both the distal and proximal stages. The differences between the stages are the results of this behaviour. At an earlier stage the focus is on team building through assessment

of prestige. By group consensus and gossip the followers develop an assessment of leader prestige. This informs them to what extent a leader will be successful in achieving the engagement of his or her followers. In information terms it dictates the degree to which followers trust the leader as a source of information and to what degree his or her information is preferentially copied. When involved in task activity, the followers use these rules of thumb to determine to what extent the team will work harmoniously or whether any antagonism remains in the network.

### 7.6.1 Towards a multi-level appreciation of interaction processes

It is evident that the process described is multi-level since, at the beginning, dyadic interaction is considered and leader outcomes include group performance. Also followers develop prestige assessments resulting in three possible outcomes (engagement, disengagement and levelling) and these outcomes could be individual or group behaviours. The competency framework which describes leader differences (the CCF) also measures individual qualities, so the individual is included as a level of analysis. All told there are three levels of analysis for the model (individual, dyadic and group). Henrich and Gil-White (2001) stated that prestige is a result of group consensus relying on observable individual behaviours (e.g. deference). Therefore prestige is a multi-level phenomenon. Incorporating a temporal factor and multi-levels of analysis credits the model with incorporating the advice of trait-process theorists (e.g. Antonakis et al. (2012); Dinh and Lord (2012); Zaccaro (2007); Lord et al. (1986)).

The leadership interaction process model is clearly a complex system. Complex systems exhibit the *emergence* of higher level behaviours from simple rules (Gilbert and Troitzsch, 2005: 11). I used computer simulation to highlight the emergence of prestige-biased group behaviours from individual prestige scores. The aim of this section is to extrapolate the findings from Project 3 to explore, with more detail, *how* prestige bias practically affects information transmission at a group level.

The next section will introduce some more data theory: computer simulation. The methodology and results of this mini-project will be discussed in the following sections to prepare the reader for the final part of the thesis: my contribution to leadership theory and practice.

## 7.7 Simulation - data theory

Project 2 considered group constructions of prestige and group outcomes: team performance. Project 3, however, was a multilevel study of the effect of prestige on dyadic exchanges of information. Although it may be assumed that successful exchanges of information at the dyadic level will accumulate to enhance team performance, this was not tested. Computer simulation has the potential to take the results of the two empirical chapters and apply them at multiple levels. For example, prestige is developed by group consensus but affects dyadic exchange. Prestige scores also differentiate individuals and affect team performance (i.e. at the group level). Therefore, a computer simulation can apply the findings of the two projects at three separate levels. My aim in using computer simulation is to explore the multilevel consequences of the two previous projects and to discover whether informal leadership emergence (prestige) has wider consequences than af-

fecting dyadic exchange. It is necessary to point out that the simulations are not a separate project but present the findings of Projects 2 and 3 in a novel way, allowing me to assess the impact of prestige building on team performance. This would not be possible with regression techniques alone.

Computer simulation is a new methodology in the social sciences: it dates back only to the 1960s although it did not achieve widespread recognition and use until the 1990s (Gilbert and Troitzsch, 2005: 1). The advantage of computer simulation is the possibilities that it opens up for the creative solution of complex problems such as are apt to occur in social situations. This is achieved because computers are capable of tracking the emergence of complexity from simple rules (*Ibid.*). I used computer simulation to exploit the opportunity created to derive a realistic yet comprehensible model of prestige and a leadership outcome: dissemination of information.

I used computer simulation to analyse how prestige can affect information transmission using the rules I discovered in the earlier three projects, especially the last project. Simulation was used to illustrate my findings and also to apply those findings at a group level. Simulation is simply a family of techniques for modelling (Gilbert and Troitzsch, 2005: 2), a method used informally everywhere and formally in science to understand complexity. Most social researchers including leadership scholars are used to using statistical models. Simulation performs the same function as a statistical model but replaces the process of parameter estimation resulting in simulated data, not predicted data (Gilbert and Troitzsch, 2005: 17). Computer simulations may be used to explain social processes, or for prediction, as well as for the discovery and formalisation of new knowledge (Gilbert and Troitzsch, 2005: 6) (*op. cit.*). Despite its numerous applications, simulations are designed following a similar process: definition of the target, observations from the target upon which to base the model, assumptions used to design the model, the execution of the simulation, verification or “debugging”, validation and sensitivity analysis (*Ibid.*). The target is the name used to describe the real-world situation under study.

Simulation allowed me to transfer the dynamics of infocopying to a production system. By changing the environment by altering prestige values in the social network it was possible to simulate conditions not observed during the empirical phase. For instance, it was possible to randomise all prestige values to simulate a non-prestige-biased hypothesis model. It was also possible to simulate the results of high and low prestige actors. This allowed me to develop the analysis to a greater degree than was possible by statistical methods alone. Although the time periods have no relation to the time it takes to pass on information in the real world, different prestige conditions could be compared with each other using the number of time steps it took to achieve the maximum number of informed actors.

### 7.7.1 Design

The target of the simulation is usually a social process and, of course, this is likely to be complex. The model is therefore a simplification of the study target (Gilbert and Troitzsch, 2005: 19). The purpose of the simulation is important in determining the balance between realistic complexity and an easy to understand abstraction. Simple models facilitate understanding while complex models are needed for prediction (Gilbert and Troitzsch (2005) *loc. cit.*). Greater detail creates increasing problems to verify and validate the model, so parsimonious models are the objective for any com-

putational social scientist (*Ibid.*:20).

To model the situations in Projects 2 and 3, a simulated social network was created comprising 39 vertices to represent the most typical size of the crews observed in the earlier projects. In terms of information transmission, density (the number of ties) will greatly affect the success of information spread through the network. Therefore all simulated networks incorporated the same density value to ensure reliable results.

Projects 2 and 3 yielded 10 sociograms per dimension. Professional prestige demonstrated both high effect sizes and the best fit to the data in Projects 2 and 3. Therefore 10 professional prestige sociograms were selected and the density of the sociograms was averaged. The mean density for all 10 sociograms was 0.17. A sociomatrix was created with the same density but with ties randomly allocated between actors to achieve the same density. The sociomatrix was similar to that described in Projects 1 and 2. However the random distribution of ties (and therefore prestige scores) created a randomly distributed prestige model to act as a benchmark for later models. This model was compared to a real world model (a typical sociogram from Project 2 with a density of 0.17). It was also compared with models where prestige was biased towards high or low ranking actors (also of the same density).

## 7.7.2 Building the model

### Introduction

I used the R programme to conduct the simulations for a number of reasons: it is freely available; it is compatible with a very wide number of platforms; it has a wide number of additional packages; and, perhaps most importantly, it is supported by a wide community of experts actively developing and teaching R. For this and other reasons, R is rapidly becoming the default language for many disciplines. I also used R in Projects 2 and 3.

Multi-agent simulations use a framework of rules called a *production system* (Gilbert and Troitzsch, 2005: 178). Projects 2 and 3 indicated the value of prestige in supporting leadership interaction and team performance. Prestige could therefore be used in a rule-based production system to calculate the probability of reliable transmission of social information. Unlike mathematical models a simulation production system does not need to employ the rules in strict order (Gilbert and Troitzsch, 2005: 179) (*op. cit.*). In fact, the agent can, loosely speaking, decide how to respond to its situation (*Ibid.*).

Multi-agent simulations require an environment to be modelled (Gilbert and Troitzsch, 2005: 181) (*op. cit.*). The environment I wished to model is the social network studied in Projects 1 and 2. With multi-agent models communications between “agents is routed through the environment” (Gilbert and Troitzsch, 2005) (*loc. cit.*). In this case the relational ties connected the agents and defined the environment.

## Production system

The code for the simulation can be found at Appendix D. The simulation uses a sociomatrix of 39 rows and columns to represent the actors and connections between them (see Chapter 6). The 39 actors simulate the crew members on the ships where I collected data for Projects 2 and 3. However, the simulation could have any social group as a target. The 39 actors are represented as vertices in a sociogram. A vector of 39 elements was also used to record the state of each actor. The population was randomly seeded with an informed actor (a vertex considered to hold information). The informed actor was always selected from the vertices numbered between 23 and 39. These represent the junior rates in my model. They were selected as the origin for information since important new information usually comes from this source. In my earlier projects these were sailors engaged in fighting fires, engaging enemy targets etc.

At each time step, informed actors attempted to pass information to naive actors with a set probability ( $s$ ) based on mean prestige in the network, for the null model, or determined by their prestige score for the prestige network. Actors who received information became informed. If the seed actor was unsuccessful, that node attempted to pass the information to a random member of the Ship's Company at base rate of transmission,  $b$  described earlier (set at 0.1). This feature represents the probability of passing information regardless of prestige biases which also means that all models will achieve saturation at some point. Formally, the null model has probability of transmission ( $p$ ) equal to the coefficient  $s$  for connected actors in the network or at the lower base rate,  $b$  for all actors (see Equation 7.1). For the prestige model, however, the probability of transmission is dictated by the prestige score of the informed actor (see Equation 7.2). Transmission is possible based on prestige for connected neighbours or at the base transmission rate  $b$  for unconnected neighbours. This is presented in Equation 7.3. Professional prestige was selected because it showed the highest effect size in Project 2, the second highest in Project 3 and the best fit to the data in both projects.

$$p_{null} = \begin{cases} s, & \text{if connected} \\ b, & \text{otherwise} \end{cases} \quad (7.1)$$

where:

$p$  = probability of transmission

$s$  = set transmission rate (based on mean prestige (0.17))

$b$  = base rate of transmission (0.1)

$$P'_D(n_i) = \frac{d(n_i)}{g - 1} \quad (7.2)$$

where:  $P'_D(n_i)$  = an actor level prestige index

$d(n_i)$  = indegree of actor ( $i$ )

$g$  = total number of possible ties

$$p_{prestige} = \begin{cases} P'_D(n_i), & \text{if connected} \\ b, & \text{otherwise} \end{cases} \quad (7.3)$$

where:

$p$  = probability of prestige

$b$  = base transmission rate

Each assessment of the vector of informed actors, their neighbourhoods and the success of their attempts to pass on information was conducted in a single time step with all individuals acting simultaneously. The number of steps was set at 50 as it was observed that all of the networks achieved equilibrium within this time. The simulation was repeated 1000 times before mean saturation times (in steps) were measured. The model was tested using verification, validation and sensitivity analysis as described by (Gilbert and Troitzsch, 2005: 22). The simulation design is demonstrated using Universal Modelling Language (UML) at Figure 7.4.

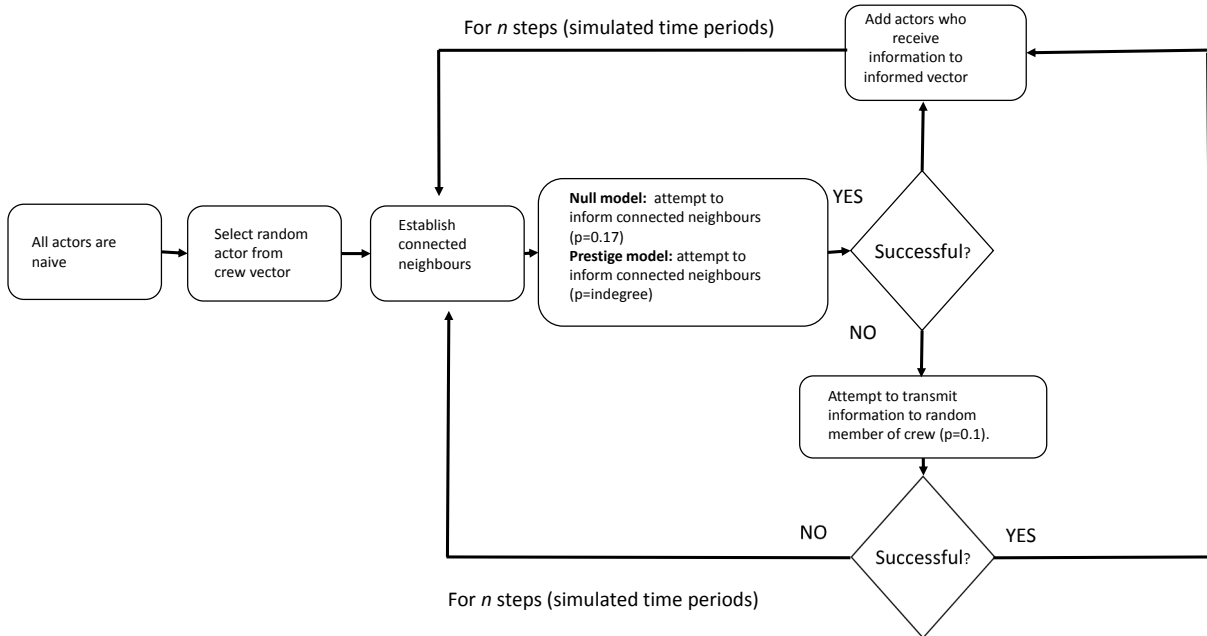


Figure 7.4: The leader-follower interaction simulation model UML diagram.

For all conditions socio-matrices were used with a density of 0.17. That is, the percentage of available ties actually used within each network was equal to this number (see Chapter 6 for a full explanation of density). As density affects the overall transmission opportunities within the network, it was important to keep it constant in all simulations. The average density of the 10 professional networks from Projects 2 and 3 dictated the value.

## Simulation models and conditions

The null model operates as described in the preceding paragraph. Prestige is accounted for by the relational ties held by an informed actor. A prestigious actor has a larger number of ties and therefore more opportunity to pass information. However the probability of passing information to each connected neighbours is the same for all actors. The probability of transmission from an informed to a connected naive actor was set at the mean in-degree (or prestige) of the whole network. This was analogous to the density value of the network (see Chapter 6).

A second model, called the prestige model, accounted for an additional effect noted in Project 3. Project 3 results determined that prestigious actors also have a greater probability of passing information than other actors. In other words, prestige had two effects: the chance of transmission is dependent on the number of connected actors (null model) and, additionally, on the prestige of the actor attempting to pass the information. Therefore a prestige model was devised whereby the probability of transmission was dictated by the in-degree of the source node. This prestige-biased model allows for opportunity and increased probability of transmission based on prestige. Both models, however, feature the same average probability of transmission across the network (since the null model uses a base rate determined by the mean prestige for all actors). Additionally the second chance to transmit information is set at a residual value of 0.1 in both models. Therefore the only difference between the models is *individual differences* in prestige, making the models comparable and isolating the effect of prestige distribution.

Simulation conditions were achieved by manipulating the prestige distribution in the four sociomatrices used for each model. The first matrix featured random ties throughout the network, ensuring the density constraint was observed. A real world model was created by copying a sociogram from Project 2 which happened to feature the average value for density. Finally two matrices were created with abnormal levels of prestige among either high or low ranking nodes. These were called “top heavy” or “bottom heavy” accordingly. The conditions were used to construct the network structure which remained the same for each condition in each of the 1000 simulations. The models and conditions are shown below:

1. Random prestige model - Randomised ties through the network
2. Real world model - Real world sociogram with same density ( $d = 0.17$ ) as the other models
3. Top heavy model - Sociogram reflecting high prestige among leaders (actors 1 - 16)
4. Bottom heavy model - Sociogram reflecting high prestige among followers (actors 23 - 39)

The sociograms at Figure 7.5 show the four conditions diagrammatically. The colour codes show how different ranks reflect prestige in the different conditions. The random distribution condition shows that higher prestige vertices (shown by larger circles) are represented by all ranks. The “top heavy” and “bottom heavy” conditions show large blue or red vertices respectively. The real world condition demonstrates some features of the “top heavy” network in that the prestigious actors are officers or senior rates. Additionally this network has greater isolation of the red lower ranking nodes than any of the other networks.

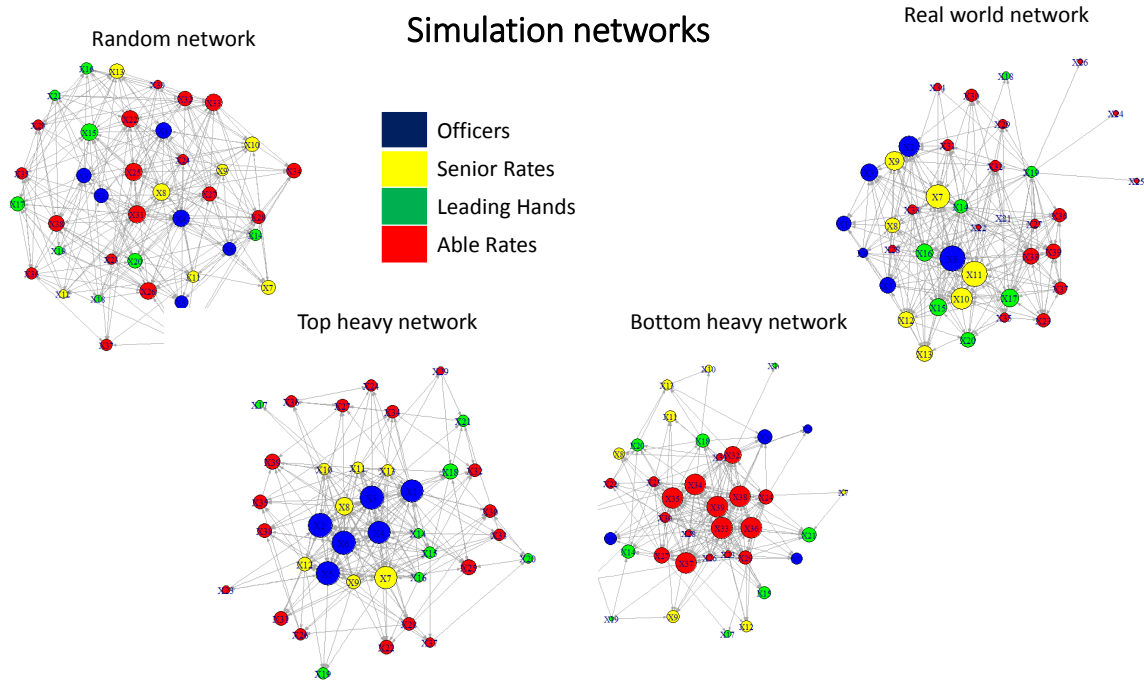


Figure 7.5: Simulation conditions

The simulation was designed to record the number of informed and naive actors at each time step. These values are averaged over 1000 simulations giving a mean number of informed actors at each time step. This also allows the mean time of “saturation” to be noted. It was this statistic which was used to gauge the efficiency of each network.

## 7.8 Results of the computer simulation

### 7.8.1 Null models

The null models, as expected, featured longer time periods to achieve saturation than the prestige models did. The mean times to achieve saturation were closer than the maximum times to the prestige models, although appreciable differences were predicted. Null model maximum times significantly exceeded the prestige models (see Table 7.1). For all null models the real world network took the longest time to achieve saturation and also had the greatest variability over 1000 simulations. The randomly distributed network was the most efficient at disseminating information whilst the “top heavy” and “bottom heavy” networks performed equally. The results of these simulations are given at Figure 7.6



## Null transmission model

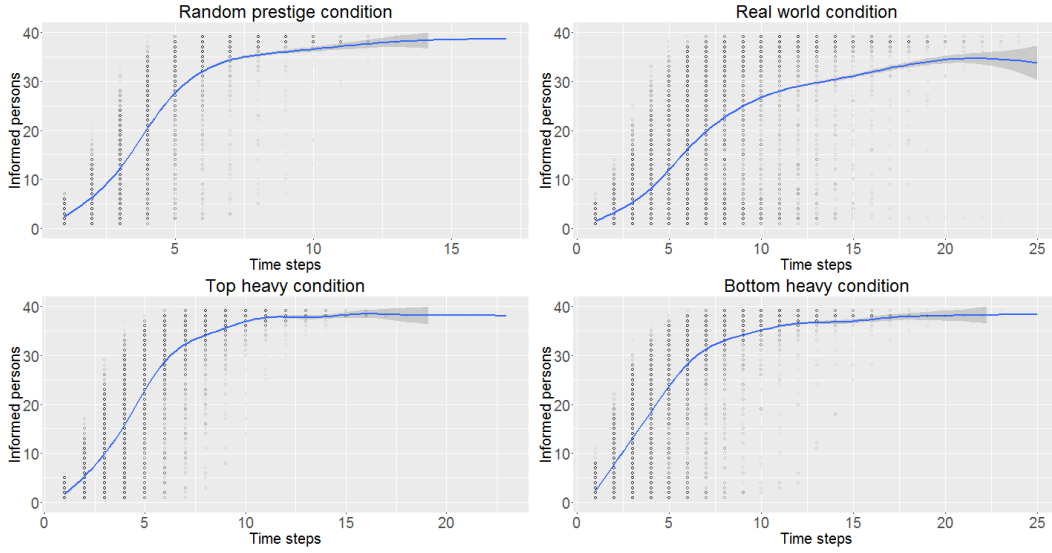


Figure 7.6: Information dissemination in the null model (social learning coefficient).

*This model has a uniform probability of transmission from an actor to connected neighbours and then unconnected neighbours. The grey shaded area represents the 95% CI. The circles show each outcome from the simulation.*

### 7.8.2 Prestige models

The prestige models were more efficient but demonstrated comparable differences between conditions. The mean prestige value used in the null model is low (which explains its lower efficiency) but the mean prestige is equal in both models. The variation of prestige in individual actors clearly allows those actors to act as efficient channels for information transmission. The relationship between the conditions is similar in both with the real world condition achieving saturation in the longest time. The biased distributions achieve a similar efficiency to each other. The random distribution condition is significantly more efficient than the other conditions. The results are given at Figure 7.7. The real world condition shows greater variability as can be seen from the standard deviation column in Table 7.1. This suggests that although real world networks can achieve comparable results, they are less reliable than the other conditions modelled. Maximum times in the prestige models were much smaller, such that mean saturation times were closer to maximum times. This means that the prestige-bias modestly affects mean saturation times but drastically reduces the possibility for slow information dissemination. The predictions from all of the simulations are listed in Table 7.1.

Real world prestige structure were shown, in Project 2, to be influenced by rank structure.

## Prestige-biased transmission model

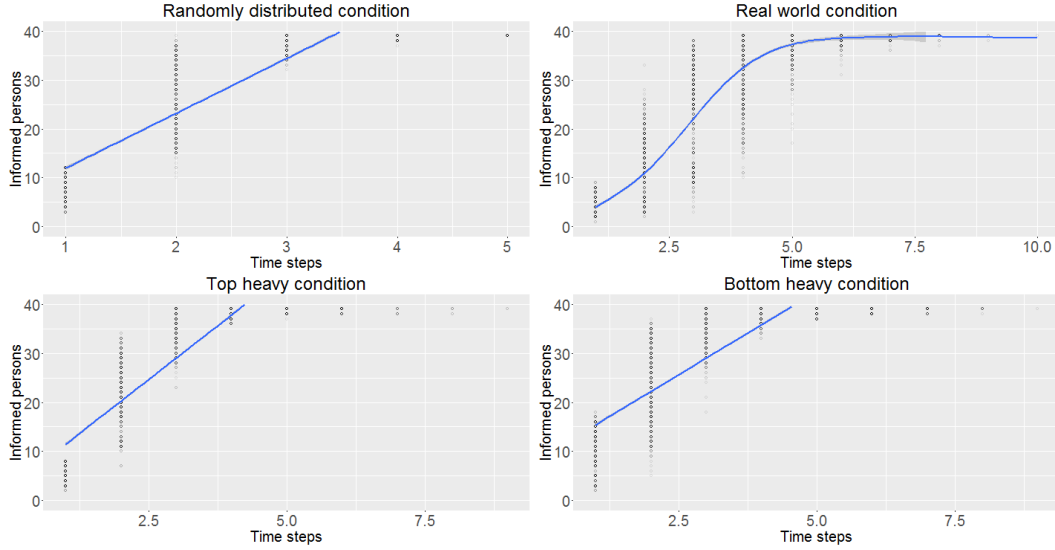


Figure 7.7: Information dissemination in the prestige model.

*This model incorporates opportunity and probability of successful transmission in prestige production system. The grey shaded area represents the 95% CI. The circles show each outcome from the simulation.*

Model and condition	Maximum time*	Mean time**	SD	95% CI
Null - Random distribution	17	4.61	2.61	$5.79e^{-2}$
Null - Real world distribution	25	7.26	4.46	$8.82e^{-2}$
Null - 'Top heavy' distribution	23	5.91	3.45	$6.67e^{-2}$
Null - 'Bottom heavy' distribution	25	6.48	3.89	$7.22e^{-2}$
Prestige - Random distribution	5	3.48	0.59	$3.67e^{-2}$
Prestige - Real world distribution	11	5.61	1.04	$6.46e^{-2}$
Prestige - 'Top heavy' distribution	9	4.25	0.81	$5.022e^{-2}$
Prestige - 'Bottom heavy' distribution	9	4.60	0.96	$5.99e^{-2}$

Table 7.1: Results prestige-bias transmission simulations

\* Maximum time to achieve saturation, \*\* Mean time to achieve saturation

Therefore the real world network echoes formal hierarchies designed to optimise information transmission in C2 scenarios. Yet the simulations show that this structure was less efficient than distorted

hierarchies and randomly distributed prestige networks. This may be due to the larger number of isolated nodes at the lower levels. This reflects an observation I made during Project 3, that prestigious actors appeared to hoard information, not sharing it with lower prestige colleagues. Both the “top heavy” and “bottom heavy” networks represented a clique of some description. Both of these structures were less efficient than a network with an equal spread of prestige. This suggests that prestige must work at all levels to allow efficient transmission of information at the group level. Both leader-centric and follower-centric approaches to prestige will be less useful in team cohesion than a whole-team approach. Although prestige at all levels improves information transmission, the prestige model clearly demonstrates the role of a few prestigious actors since these individuals can channel information more reliably. It stands to reason that a null model, featuring high prestige scores throughout, would out-perform this model but is unlikely to reflect reality.

## 7.9 Discussion

### 7.9.1 Key findings from the simulations

The simulations demonstrate that prestige-biased networks are more efficient than others at disseminating information. The simulation design was particularly effective at demonstrating this because the number of ties in the prestige model and the null model are the same. Therefore actors in the network have an equal opportunity to pass information in both models across the network. But the probability of success varies at the dyadic level in the prestige model. This allows prestigious actors to act as channels for information, resulting in a more reliable network. This demonstrates the value of prestige for group coordination rather than viewing it as an artifact of leader differences. By choosing sources of information and conferring prestige, followers can enhance the coordination of their group.

A network based on the average social network from my sample was less reliable than deliberately biased or random networks, both of which are less likely in hierarchical groups. Although real world networks were close to the mean saturation times of the faster prestige networks, the maximum saturations times were much longer. There was more variability in the results for these networks. Comparison of the conditions shown at Figure 7.5 demonstrate that prestige in the real world network is highest among some senior rates and officers, but not all. The “top heavy” network features high prestige among all officers and senior rates. One might expect a real world network to be similar to the “top heavy” network, but as seen in Projects 2 and 3, prestige differs from rank. The real world network has fewer channels into the higher echelons so that information can get *stuck* more often than the other networks. Very possibly social structures in hierarchical and military organisations are designed around moving information from the top to the bottom of the organisation. However, a lot of important information is discovered by low ranking members of the group. All of the projects show that low prestige persons are not listened to and I witnessed cases of high rank/low prestige individuals being repeatedly ignored.

Although prestige-bias only modestly affects average saturation times, it greatly affect maximum saturation times. In other words, prestige-bias reduces the variability of team performance in terms of passing information. It makes teams more reliable by indicating trusted sources and channels

of information. This is leadership emergence in action. A random distribution of prestige ensures that these information channels extend through the network, preventing bottle necks. Therefore teams which feature a large number of prestigious individuals at all levels will be more coordinated than a team with one or a few prestigious leaders. If novel information presents itself within a low prestige clique, Project 3 has demonstrated it is less likely to make into the wider network, since these individuals are not listened to as much. There are clear implications for post-heroic leadership and its focus away from leaders, especially shared or distributed leadership. However distributed leadership (if formal) is different from distributed prestige; it would be necessary for leaders within a distributed or shared structure to be prestigious. These findings also have implications for the post-heroic discussion of the social construction of leadership, and coevolutionary mechanisms for prestige building.

### 7.9.2 Key findings from all projects

From my original research question these three projects set out to discover the nature of good leadership interaction, and after defining it, verify it and, find *how* it works. Project 1 established a contested form of interaction where encounters built to create group consensus of leader prestige. Prestige is based on advice (information) and participation which appears to be a form of self-levelling. Groups may resist leadership using a number of covert techniques including the use of information. Project 2 established the effectiveness of four dimensions of prestige by observing the role of prestige in a social network. All four dimensions described everyday interactions rather than heroic behaviour. Finally, the role of information discussed in project 1 was linked to prestige to suggest high prestige actors are “listened to” (Henrich and Gil-White, 2001), their information being regarded as high value. Project 3 provided empirical support for this notion although participation networks were not linked to information. The role of these networks was established in Project 1 as a means to avoid levelling behaviour or resistance to leadership.

Computer simulation demonstrated two important issues. Firstly it demonstrates that hierarchical structure is not necessarily a more efficient framework for communication: a real world condition may be less efficient than a random condition. Also structures which feature prestige throughout levels are more efficient than those with asymmetric distributions (e.g. ‘top heavy’ structures). Finally, individual differences do make a significant impact on team-work because prestigious individuals can increase network efficiency. However, these individuals are not necessarily formal leaders. Current assumptions may therefore be counter-productive. This challenges a common assumption that leaders are solely responsible for outcomes.

## 7.10 Conclusions

The resulting model is a post-heroic model based on a competence (interact) but defining a process of mundane interaction culminating in building a group consensus of leader prestige. Prestigious actors share information, ignore low prestige actors and engage to improve team performance. Low prestige leaders may be subject to levelling activity to “bring them down a peg or two”. Project 3 and the simulation data from this chapter demonstrate how prestige assists the transmission of informa-

tion, suggesting that prestigious leaders are models to whom others look for key information. This enhances group coordination, a key leadership output. Projects 2 and 3 demonstrated empirically that prestige is linked to team performance. The simulations in this chapter demonstrate, however, that prestige must be distributed throughout the network to make teams efficient. This contradicts heroic approaches to leadership where it is assumed that only leaders need to accumulate prestige.

Part III will consider the contribution of the three projects to leadership theory and practice in addition to the reliability and validity of the research. I will also summarise future research directions which are a consequence of the analysis.

## Part III

# Part III: Contribution

## Chapter 8

# The contribution of this research to leadership theory

*We must endeavour to follow his example, but it is the lot of very few to attain his perfection.*

(Admiral Collingwood on Nelson (Jones and Gosling, 2005: 142))

### Overview

*In this final section I will review the problems caused by describing leadership in heroic terms, and how I develop my contribution to leadership theory to avoid these pitfalls. An overview of my research design describes the use of sequential exploratory design to obtain follower-centric views of leader-follower interaction. This research design enhances the reliability, validity and generalisability of my results. I discuss these results in terms of a leader-follower interaction process model and how this model adds to number of leadership theory strands: traits and competencies, engagement and resistance, as well as levelling and prestige from anthropology. Finally, I discuss levels of analysis and limitations followed by a summary of the impact of my research in theoretical and practical terms.*

### 8.1 Introduction

In the quote above leaders are encouraged to follow the example of Nelson, a legendary and heroic example of leadership. It is not just the RN who hold this type of leadership as a beacon for commanders and managers alike. In fact the management bookshelf is replete with Nelsonic references. However, Admiral Collingwood's words hold another message which has been overlooked by many students and practitioners of leadership: very few will attain this goal. What then of the leadership that must be practiced by the majority?

Leaders seem to have been judged, in western tradition at any rate, on a single scale with historically distorted models like Nelson at one end and non-leaders at the other. It is becoming more

apparent that this model is limited in both theory and practice. Yet, even though workplaces are not usually dominated by Nelsonic characters, leadership can and does happen. Post-heroic paradigms of leadership are becoming more popular as a way of describing leadership that goes beyond Nelson. Leaders will always take inspiration from historic persons; it is not my intention to criticise this tradition. However, my research adds to the growing literature concerning commonplace leadership which results from leader-follower interaction.

In this final chapter I will discuss my leader-follower interaction process model, highlighting the contribution that it makes to leadership studies, affirming the post-heroic direction and by adding detail to the new and developing trait-process models (Casimir et al., 2014).

This chapter begins with a section which describes the research process and where background, focal and data theory fit within the development of theory. I will then defend the interpretive framework, including my reasons for choosing mixed methods of research. This section will comment on the rigour and reliability of my methodological choices. I will briefly review leadership interaction model which emerges from the research. The significance of the leader-follower interaction model is discussed which includes the contribution that it makes to specific areas of leadership theory. A section is then devoted to a multi-level analysis of the model before pointing out the limitations of the research. I will then discuss the implications for leadership and leadership development in practice; both in the RN and generally. The chapter concludes with a description of potential research directions which follow from my research.

## 8.2 The development of theory in this research

(Phillips and Pugh, 2005: 82) describe the process of research that leads to a PhD thesis as moving from maximum to minimum uncertainty through background, focal and data theory before making a contribution to the field of study. This thesis is structured along similar lines, progressing from the background theory of leadership studies where considerable uncertainty exists over the nature of leader-follower interactions. This uncertainty may be because trait-process theories of leadership are still to develop a comprehensive description of leader-follower processes (Casimir et al., 2014). However, based on my own experiences, I was convinced that interaction was the key to team performance. But I could not describe what interactions are important or how they promoted team work or other leadership outcomes.

Using mixed methods to explore the notion of interaction I discovered an original synthesis of leadership studies and anthropological theory: engagement, disengagement and levelling. Four modes of interaction: professional credibility, personal approachability, sports participation and social engagement supported these three leadership processes. I was able to empirically test these interaction themes against team performance (Project 2) and team communication (Project 3). Professional and personal prestige built up through advice networks supports a prestige biased transmission model while leaders who participate equally in certain activities (on level terms) are integrated with the group.

Prestige-building activity described in the qualitative phase of this research placed these inter-



actions firmly in the mundane and everyday encounters between leaders and followers. My PhD research process has incorporated focal theory in the form of engagement theories, prestige theories and theories of resistance to leadership (or levelling). My data theory has been varied, ranging from grounded theory, which is qualitative, to the mathematical techniques of network analysis, statistical methods such as logistic regression, and simulation from computer science. The use of mixed methods can deliver greater reliability and validity than qualitative or quantitative methods on their own (Creswell, 2009: 203). The sequential exploratory process and specific theory are shown at Figure 8.1.

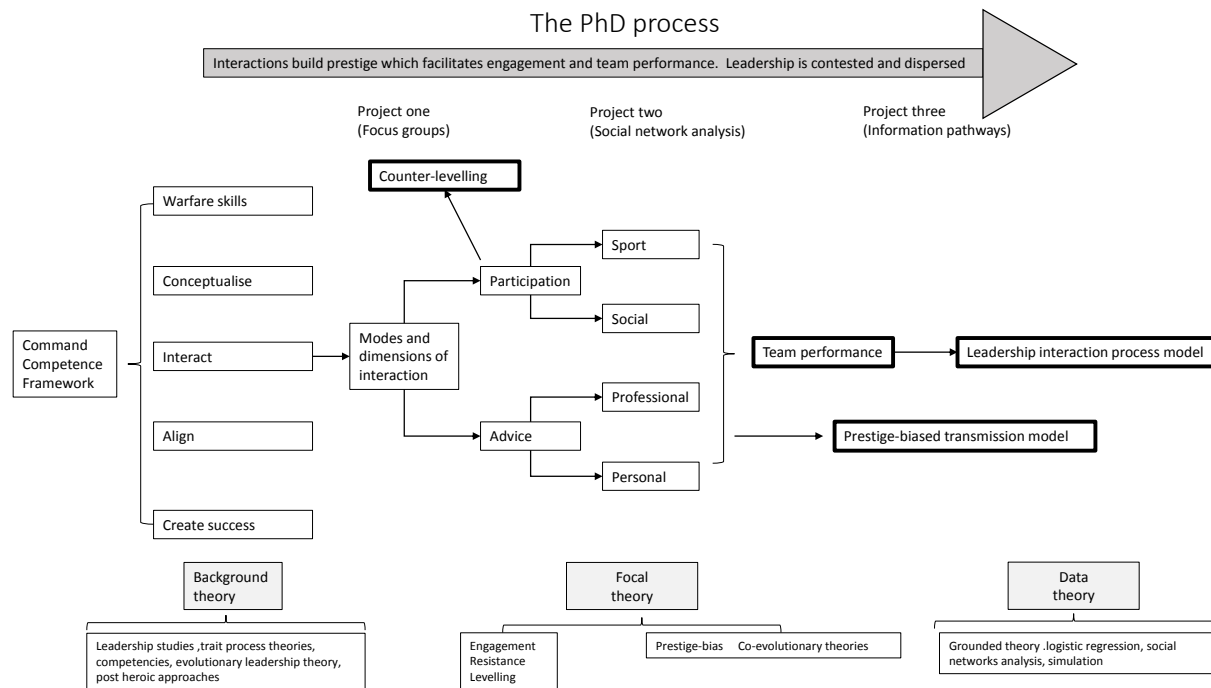


Figure 8.1: The PhD process from background theory to contribution of the research

### 8.3 Reliability, validity and generalisability of this research

Both qualitative and quantitative methods have inherent limitations; mixed methods are able to mitigate the shortfalls of both frameworks (Creswell, 2009: 203). Because of this mixed methods are growing in popularity, becoming a natural development in research techniques (*Ibid.*). There is more to be gained from the blending of the two modes of research than by employing either one on its own (*Ibid.*).

I have selected a sequential exploratory research design (Creswell, 2009: 206). Exploratory designs are those which feature qualitative work first in order to induce original insights before testing them quantitatively (*Ibid.*). The data sets for each project are separate so that the results of the qualitative work are used to develop the instruments in the quantitative projects (*Ibid.*:219).

Rather than mixing the data by analysing the same data using different interpretive frameworks I connect the different data sets with my research questions (*Ibid.:207*). The research questions all concerned interaction, developing a 'golden thread' through the research.

Qualitative methods have been criticised for a lack of rigour (Bryman and Bell, 2011: 394-5). However, epistemological robustness can be achieved in qualitative research (Bryman and Bell, 2011)(*loc.cit.*). The use of a grounded approach reverses the typical problems of cross-sectional research design (*Ibid.:56*) and therefore mitigates this issue in Projects 2 and 3. Internal validity is high because of the inductive approach, whereas immersion of theory in context is likely to weaken the generalisability of the findings (external validity). Again the use of mixed methods serve to balance out this problem, since the quantitative projects will be reproducible in alternative research contexts. Internal reliability is a difficult criterion to achieve in qualitative research (*Ibid.:394*); however, the protocol of grounded theory adds discipline to the methodology. The system of codes dictated by Corbin and Strauss (1990) generates a framework which allowed reliability to be constantly checked. This system of *recursive application* supports the internal reliability of the analytical process (Bryman and Bell, 2011: 576). Overlaps or intersections and clustering of codes (see (Bazeley, 2007: 182-192)) also serve to test robustness of the conclusions. Interviews were repeated beyond the point of theoretical saturation (Morgan, 1996) to ensure a full picture was collected. In practice the coding and re-coding transcripts to ensure all themes are captured makes qualitative research as meticulous as quantitative methods.

External validity and reliability, broadly speaking, refer to the transferability of the method and results of the research. These are areas where qualitative studies are at a disadvantage (Bryman and Bell, 2011: 394). In this case the findings are used to define narrow research questions which are then tested deductively for their validity using reproducible techniques.

Projects 2 and 3, as more traditional cross-sectional surveys, create a traditional validity situation (high external / low internal validity) (Bryman and Bell, 2011: 56). As stated earlier grounded techniques are effective in countering validity problems with cross-sectional research. Specifically the use of grounded dimensions in the statistical instruments increases internal validity. Internal reliability is high for these two projects. The scoring system used to assess team performance in Project 2 was found to have a very high reliability score when compared with RN written instructions despite a large number of assessors ( $\alpha = 0.904$ ). The results of information transmission for Project 3 were observed directly and were dichotomous; there was little room for error. Both quantitative projects incorporated a simple questionnaire which took less than five minutes to complete. The SNA and logistic regression techniques are also well known, allowing me to conduct a comprehensive set of tests for reliability and goodness of fit. Therefore the external reliability of these projects is high.

Clearly, the exploratory project was extremely contextual. It describes leadership not only in the RN but among the small patrol and mine-clearance vessels. These teams are tight-knit and work in extreme and isolated environments. Small teams feature a greater deal of self-reliance than larger units where there is greater redundancy. It is not unusual, for example, to find a steward controlling the ship whilst in a minefield. In terms of external validity, it is easy to apply the findings of the leader-follower interaction model to other military organisations, as well as other tight-knit teams

operating in extreme conditions; such as the emergency services, survey teams, sea-farers or oil rig companies. The research I have conducted has already had impact within the RN. This has been in three specific areas: the use of sport to improve team cohesion, a better appreciation of prestige and a change in leadership policy to incorporate less leader-centric approaches. This is discussed in greater detail in Appendix F.

Whilst the specific motivators and de-motivators discussed in Project 1 are very much based on the research context, the principle of the leader-follower interaction model is based on more generalisable rules. The notion of prestige, for example, appears as a universal human trait, as does ambivalence to leadership. In fact it has been the historic blindness of leadership studies to this observation which may well have held back research until recently. Therefore there is no reason to assume that the model would not work in modern businesses or work places, although more research would be needed to verify this. The finding that participation prevented levelling behaviour was strongly advocated by Project 1. However, due to the covert nature of levelling, this could not be verified by the following projects. The advantages of the mixed methods approach could not be employed in the case of levelling theory. Anecdotal evidence was collected during Project 3 but further research into levelling behaviour is needed. The relative lack of resistance to leadership theory, the absence of resistance strategies in practical leadership development combined with its contrasting presence in anthropology, makes resistance to leadership a potentially very important subject in both leadership theory and practice.

## **8.4 Review of the leader-follower interaction process model**

### **8.4.1 The leader-follower interaction process model**

The process model at Figure 8.2 describes a long term and continual development of prestige through which leadership emerges. It is a contested process which, unusually in leadership studies, incorporates resistance as a continuous factor. The leadership-interaction process model described in Project 1 now describes the internal processes at each stage of the model.

The model uses the form described by trait-process theorists (Antonakis et al., 2012). However, I have developed the model through the addition of detailed outcomes at each stage. The continual assessment of prestige is represented by feedback of leader and follower behaviours shown by the diagrams inserted at the distal and proximal stages. Leadership emergence is a result of prestige building, so this necessarily comes prior to other leadership outcomes.

### **8.4.2 Definition of leadership interaction**

The research questions raised in Chapter 1 and refined during the research are aimed at defining leadership interaction. The definition of the CCF competence *interact* was thematic but I was interested in specific behaviours. I define leadership interaction as reciprocal leader and follower behaviours which lead to leadership outcomes (good or bad) such as leadership emergence, team performance and communication. In terms of specific behaviours I have established two modes of interaction: advice networks and participation networks. The first mode concerns professional

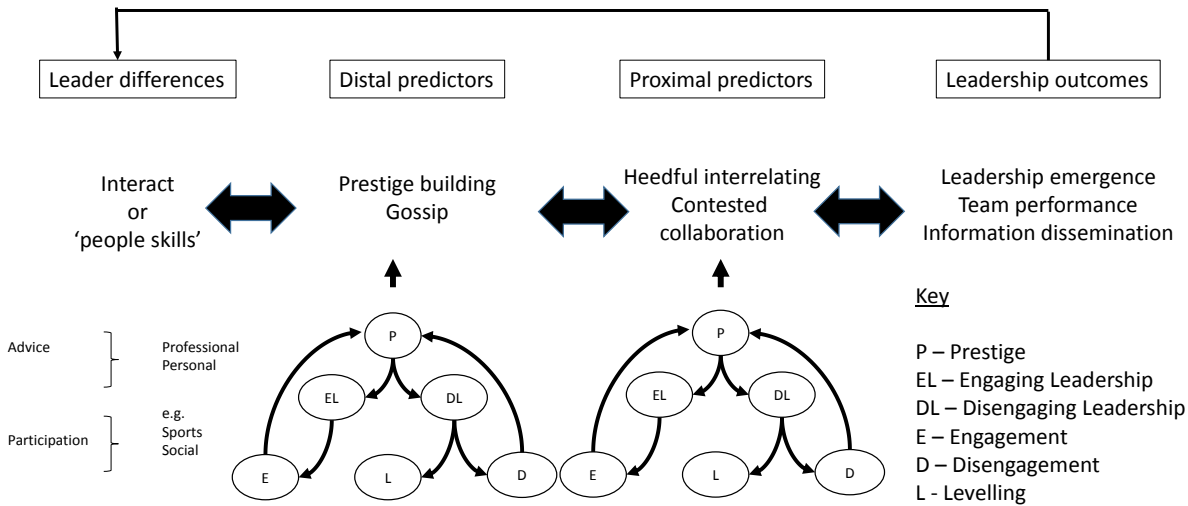


Figure 8.2: The leader-follower interaction process model

and personal prestige developed through everyday encounters which convince followers that leaders are experienced, competent and approachable. These are narrowly defined and generalisable behaviours. Participation refers to any activity where leaders engage alongside followers in events on equal terms. There are a number of possibilities but naval teams preferred sports and social interaction. All of the behaviours considered were commonplace occurrences. At no point did the focus group participants discuss, or did I witness, charismatic or powerful behaviour from leaders which affected leadership outcomes. I am not suggesting that this is not a bone fide leadership behaviour with consequences for team alignment but this research suggests that this aspect of leadership is not strictly *necessary* for leadership outcomes. I therefore agree with Karp (2013) and Larsson and Lundholm (2010) that leadership is a mundane process and that a bias in leadership research continually categorises heroic behaviour as leadership and banal behaviour as management.

## 8.5 Significance of the leader-follower interaction process model

The aim of this section is to highlight my contribution to theory. In doing so I will explain how the situation is now different for certain areas of the background and focal theory. My findings have impact in a number of areas so each theme will be discussed in the sub-sections below:

### 8.5.1 Traits and competencies

As discussed in Chapter 2, leadership traits are the traditional vehicle for leadership scholars but have suffered a decline since the mid-20th century. Although not as popular as they once were, traits

have enjoyed a resurgence recently (Antonakis et al., 2012). I have grouped competencies with traits in my review of literature. It might also be said that competencies replaced traits when trait theories became less popular after a review by Ralph Stogdill (Stogdill, 1948). I have grouped them together because both are examples of individual differences in leaders which attempt to explain leadership outcomes. More specifically I have used the RN's competence framework for Commanding Officers: the Command Competence Framework (CCF) (Navy, 2011a). Within this framework I have traced a process from a competence (*interact or people skills*) through distal and proximal predictors to leadership outcomes.

My research supports the assertion that *interact* is correlated with superior team performance (Young and Dulewicz, 2005, 2007, 2008, 2009). Project 1 participants were emphatic that interaction supports leadership and specifically team performance. By using these findings to develop the research instruments for Projects 2 and 3, I was able to find statistical support for the Project 1 findings and the foundational research (Young and Dulewicz, 2005, 2007, 2008, 2009). Furthermore, Project 1 defined interaction based on advice and participation networks. This complements the CCF by adding detail of what sorts of interaction support leadership and how they do so. Advice networks are based on credibility in professional terms and personal approachability. Participation networks appear to support the integration of leaders in an acceptable way to followers, which crucially avoids resistance. In addition to validating the CCF and supporting the notion of individual difference in successful leaders, this research provides a detailed leadership process to add to the trait-process literature. The principal motivator in the leader-follower interaction is prestige, which will be reviewed later in this section.

Within the trait-process tradition there has also been discussion about what constitutes leadership outcomes. Lord et al. (1986) maintain that one problem with the research of traits is that it has been misguided in assuming that team performance is a result of leadership traits. They suggest that traits determine leadership emergence instead. However, my research includes both leadership outcomes. Project 1 clearly demonstrated a prestige-building process which results in leadership emergence as predicted by Lord et al. (1986) but Projects 2 and 3 quantified team performance and information management as leadership outcomes.

### **8.5.2 Engagement and levelling: a new synthesis**

Qualitative theory is often used to derive new theory but it can also be used to pull existing theoretical themes together (Bazeley, 2007: 184). Project 1 drew on engagement theory (Kahn, 1990) to explain the way beneficial interaction resulted in superior team performance as it was described by focus group participants. The groups also discussed a universal ambivalence to leadership which could not be explained by leadership theory. Resistance to leadership is a neglected area of leadership studies (Collinson, 2012) making it necessary to look elsewhere for relevant theory.

Anthropological theories contain a nuanced, covert and universal narrative which explains contested leadership in a novel way: social levelling (Eerkens et al., 2009; Boehm, 2001). Describing the actions of followers in terms of engagement, disengagement and levelling fitted the emergent themes in the focus group transcripts. Engagement and disengagement are the giving or withdrawing of discretionary effort (Kahn, 1990). Levelling incorporates a number of subtle and covert behaviours which aim to reduce the power differentials between leaders and followers (Van Vugt and Ahuja,

2010). The addition of levelling to leadership theory is an important development since resistance theories are few and most define resistance as an aberrant behaviour rather than a norm (Collinson, 2012). Although a few leadership scholars have tackled resistance (most notably David Collinson), these few studies tend to focus on serious upheavals rather than an everyday low-intensity contest between leaders and followers (but see Collinson (2002); Rodrigues and Collinson (1995)). Social levelling theories include a full spectrum of follower behaviours, and their inclusion in leadership studies is an enhancement.

Levelling, as a subtle behaviour, is difficult to quantify and so has remained a finding of Project 1 only. The continual references to levelling and the findings in previous research (Collinson, 2012, 2002; Rodrigues and Collinson, 1995; Eerkens et al., 2009) suggest that it is a universal human behaviour which has been seriously overlooked. The effects of prestige were tested empirically in Projects 2 and 3 on team performance and information transmission respectively. Therefore this original synthesis has been developed and tested within this research. The integration of existing theory is especially important when one considers the fragmented nature of leadership studies (Gill, 2011: 63)

My research also connected engagement theory and social levelling with traits and competencies (see (Offord et al., 2016)). Although social levelling, as viewed by anthropologists, is usually considered in the context of social dynamics, engagement theory has been viewed in a somewhat disembodied way. Although the antecedents for engagement and disengagement are discussed by Kahn (1990) (but see also Xu and Thomas (2011)), the discussion is thematic, outlining the conditions for engagement but not connecting it to the personalities of leaders. I believe this analysis offers an alternative but complementary view of engagement.

### 8.5.3 Prestige

Prestige is not unknown to leadership scholars, Balkundi et al. (2011), Hoppe and Reinelt (2010) and Balkundi and Kilduff (2005) who have used centrality in social networks as an analogue of prestige (although I define it differently in Projects 2 and 3). From the first project it was clear that leader credibility was an essential feature of the social process of “prestige giving” (Barkow et al., 1975) or, as it has been stated in leadership studies, *granting leadership*. Prestige links the synthesis of engagement, disengagement and levelling by acting as an antecedent. Project 1 made it clear that prestige is built over time and through mundane encounters between leaders and followers. Slowly and quietly a group consensus of leader prestige develops based on these interactions. Prestige triggers engagement, disengagement and levelling. Prestige researchers have asserted that prestige is the human analogue of dominance (e.g. Henrich and Gil-White (2001)) and that status is achieved through the development of prestige rather than by force. This places a lot of power in the hands of followers since they are the “prestige givers” (Barkow et al., 1975).

This contested process shapes the emergence of power structures within a group and supports leadership emergence in much the same way that primatologists and anthropologists have argued takes place in non-human societies (e.g. Flack (2012)). This process of social construction has been applied to power structures in human society by primatologists (e.g. Boehm and Flack (2010)) and in leadership studies (e.g. Spisak et al. (2015)); it is very similar to the process of prestige-building

that I have described. The process is called social niche construction (Spisak et al., 2015; Boehm and Flack, 2010)

My contribution is to describe a process of “prestige giving” as a contested series of encounters leading to the granting of leadership (engagement) or negative outcomes (disengagement or levelling). This is a fine-grained description of the leadership process which is based on everyday encounters as predicted by Karp (2013) and Larsson and Lundholm (2010). Follower feedback shapes future leadership behaviours and the conditions for leadership emergence. This is an example of social-niche construction (Boehm and Flack, 2010). Although this theory is not new, indeed it has featured significantly in anthropology, it is not commonly found in mainstream leadership theory, nor to my knowledge has prestige been connected with niche construction. It is therefore the connection of prestige with the leader-follower interaction process which I suggest is an original contribution to theory. Additionally, this process is a gradual and banal series of interactions through which a social niche is created for leadership emergence.

The empirical findings of Project 3 add more statistical evidence to prestige-bias theories of social learning and cultural transmission. Also the illustrative computer simulations, used in the discussion section, show the great extent to which prestige can change information dynamics in a team when observed at the group level. The simulations also demonstrate that prestige must be dispersed to be of value. Single or a few high-prestige actors will not lead to a high-functioning team, since information will be blocked by lower-prestige actors. This disputes the notion of centralised leadership, a common assumption in traditional leadership studies (Bligh et al., 2011; Meindl, 1995). Again, computational methods are still rare in leadership studies but the model I developed demonstrates through a simple rule that high functioning teams feature distributed prestige. Again this disputes the notion of centralised leadership (*Ibid.*).

## 8.6 Levels of analysis

In Chapter 2 I pointed out that trait process theories of leadership require multi-level analysis (Antonakis et al., 2012; Lord et al., 2001). Specifically Antonakis et al. (2012) demonstrate that models must show how higher level leadership behaviours or traits affect lower level follower behaviour. However, I have not assumed that leader-follower interactions span levels of analysis. Essentially these interactions are dyadic. Project 1 suggested that these interactions are not qualitatively different simply because they span hierarchical levels. Project 3 showed that rank alone is not as influential as prestige, in fact high ranking but low prestige individuals were observed to be ignored by higher prestige actors. Therefore I have concentrated on levels of analysis from individuals to groups. Trait process models incorporate individual differences at the beginning of the process, I have done likewise by focussing on the *interact* competence for which naval leaders are selected. From individuals I have considered dyadic interactions as a part of the prestige building process. Prestige requires a group consensus initially at sub-team level or between cliques. Finally the whole group behaves according to norms established at individual, dyadic and clique levels.

Prestige is implicated at each level of analysis. The computer simulations included in the discussion at Chapter 7 demonstrate the *emergence* of group behaviour during an information transmission

task. Individual prestige scores affect dyadic transfer of information which percolates to the clique and group levels. It is clear from this analysis that prestige (and therefore leadership) is dispersed. Low prestige at lower levels can create bottlenecks and reduce team performance regardless of the prestige in higher ranking actors. The model at Figure 8.3 is the leader-follower interaction process model but redrawn to account for multiple levels of analysis.

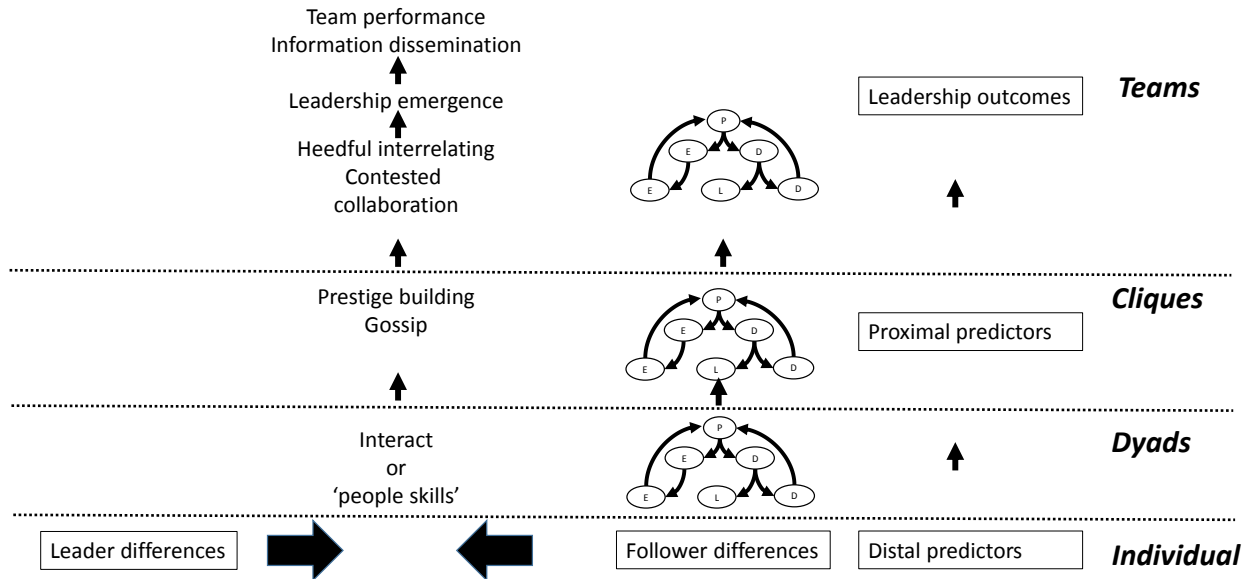


Figure 8.3: The leader-follower interaction process model illustrating levels of analysis

As with many complex systems, the rules at each level are simple. However, because the simple rules are followed continuously at each level of analysis, feeding forward to higher levels and also back to lower levels, the emergent behaviour is very complicated. This makes the prediction of the end-state extremely difficult even if the beginning state (e.g. leader traits) is well understood. Similarly, although the *interact* competence, which begins the leadership process, is a selection feature for leaders, the interaction between leaders and followers (and the context) are likely to lead to complex outcomes. Ultimately, a greater predictive accuracy is achieved if the *interact* competence is understood throughout the group.

## 8.7 Limitations of the research

Social levelling was discussed at length in Project 1 but, aside from some first-hand observation in Project 3, I was unable to verify the phenomenon quantitatively. As discussed, this is due to the often covert nature of this behaviour. There is however, a full account of levelling behaviours in anthropological sources (e.g. Sveiby (2011), Boehm and Flack (2010), Eerkens et al. (2009), Boehm



(2001) and Boehm (1993)). Therefore I believe that discussion of levelling has sufficient agreement to support the findings from Project 1. Because military environments necessarily reduce the power of followers, levelling behaviour is likely to have more, and not less, scope outside of the hierarchical structure of Navy life. However, I was unable to quantify the effect size of this behaviour and the extent to which it could thwart leadership goals. The few examples which I observed in Project 3 suggest that levelling effects could be profound.

Projects 2 and 3 suggest that advice networks in the form of professional and personal prestige are situationally stable and they appear to affect leadership outcomes in terms of team work and information transmission. Participation networks however affect team work but not information transmission. The research context for both projects was very similar: small ships with crews of around 40. It was therefore possible to make the comparison between effects on teamwork and information transmission. Furthermore, participation networks are varied and context specific; researchers will need to define the participation networks in use in different research contexts.

The role of information has been emphasised in my research. This is largely because Project 1 participants emphasised the significance of information behaviour. The crucial role of information in a Command and Control environment may also have magnified the importance of this aspect. For naval teams information defines not only their jobs but also when they are likely to see their families or indeed whether or not they will be placed in danger. It is plausible that other contexts may not feature information to such a great extent in assessments of prestige.

Many of the specific engaging and disengaging leadership behaviours are highly contextualised and may not be generalisable outside of a naval environment. For this reason I have not explained these behaviours in great detail and have focussed instead on the underlying mechanisms of prestige-building, which I assert *are* generalisable.

The effect sizes of the prestige scores in Projects 2 and 3 are also highly contextualised. The importance of teamwork varies across tasks. Tasks dependent on equipment or external factors may not be affected by teamwork at all. Additionally the logistic regression outcome was sensitive to small changes in prestige because of the way log-odds (the logarithm off the odds) are used to define it. The result that prestige scores were significantly and positively correlated with outcomes is robust. But it would be dangerous to apply effect-sizes to other contexts.

Broadly speaking the exploratory nature of my research and the qualitative aspects make some of the findings non-generalisable. Any researcher using an interaction-process approach to leadership must define his/her own interaction factors as I have done rather than use the particular findings from this research. However, overall the mixed-methods approach has mitigated the disadvantages of either quantitative or qualitative approaches. I have highlighted the underpinning process of prestige-building in two modes (advice and participation) with the effect of engagement, disengagement or levelling. This process has been shown to be evident in naval teams, but it is also generalisable since I have avoided deeply contextualised behaviours in the RN.

## 8.8 New research directions

As I have stated in this summary, the findings on levelling behaviour have not been quantified. This area of leadership has received scant attention from leadership scholars in the past. Resistance would be a valuable topic for development, adding considerably to a more comprehensive understanding of leadership processes. Since this subject has not been researched greatly it is important to better understand the extent to which resistance and levelling affect leadership. Researchers in this area will need to develop the means to collect data on levelling behaviour, which will be a challenge.

Research into the leadership-interaction process model should be conducted in different contexts to verify that the broad processes I have described, can be confirmed outside of a highly formalised organisation. Intuitively, this is highly likely since the process is informal by nature. That it can exist in a naval environment suggests strongly a universal feature of social life, teamwork and leadership. Equally, the social and technical environments in which social networks exist and evolve could be studied longitudinally. This could be used to investigate how prestige and levelling are contingent on the cultural environment such as hierarchical structures.

Research could also be conducted in equally formal or hierarchical situations but in larger-scale teams. Teams which are not as close-knit, as in the RN, might offer alternative nuances and variations in the model described.

My research has indicated that charismatic leaders and leadership style are of less consequence than is often considered by leadership scholars. This bias may be an artifact of the heroic paradigm of traditional leadership research. However more research into the role of charisma and style in relation to prestige would resolve this important question which has resulted from this research.

## 8.9 Conclusion

Leadership is achieved through the winning of prestige from “prestige givers” through a lengthy and mundane series of interactions. Followers are ambivalent about leadership and have more power than is often conceived. They respond to a group consensus of leaders’ prestige through engagement, disengagement or social levelling. Engagement can lead to enhanced team performance and improved communication. Disengagement leads to the opposite leadership outcomes. Levelling is an attempt to reduce the power differentials between leaders and followers. It is subtle and often covert to protect followers from direct censure. Nevertheless, the feedback, both positive and negative, aims to modify leader behaviour.

Leaders achieve prestige primarily through the establishment of their superior knowledge (professional and personal prestige). ELT approaches explain the need for leaders to resolve group coordination problems. Since followers are reluctant to be led, leaders must offer benefits to the group. Hence the need to establish prestige as knowledgeable individuals. This contradicts the notion of leaders as heroic or charismatic individuals, since these attributes do not necessarily offer followers any benefit. Professional knowledge, for example, is less exciting but certainly of value to the group. Prestige in participation networks satisfies the need in followers to accept modest leaders

prepared to share the same experiences as followers.

Leadership is a complex process based on simple rules of prestige building at an individual and dyadic level. The emergence of behaviour at the group level demonstrates complexity and great variability, as computer simulation demonstrates. The random distribution of prestige in a group can lead to great variation in team outcomes. This explains why there is variation in the performance of outwardly similar teams. In particular prestige distribution within teams outweighs the effectiveness of a single leader by a significant margin.

Leadership is distributed, contested and based on everyday encounters between leaders and followers over a long period of time. Leadership research which focusses on single leader attributes, assuming that specific types of leader explain success or failure, cannot grasp the totality of leadership processes. The measurement of leader attributes is unlikely to be a reliable predictor of leadership outcomes due to the complexity of the system. Measuring prestige throughout a group is a more reliable method of predicting leadership outcomes.

# Appendices

## Appendix A

### Project 1 - Transcripts

## INTERACT FOCUS GROUP 1 – TRANSCRIPT

DATE 10 May 2011

VENUE HMNB Clyde Waterfront Education Centre Classroom 3

### PARTICIPANTS

Name	Gender	Age	Consent
Judas	M	29	√
Suzy	M	26	√
Taff	M	35	√
Pat	M	31	√
Stacey	F	24	√
Scouse	M	24	√
Devo	M	24	√
Nick	M	26	√

	Timespan	Content
1	0:00.0 - 9:10.0	<p><b>TOPIC 1 – THE VALUE OF INTERACTION</b></p> <p><b>HOW IMPORTANT IS INTERACTION?</b></p> <p><b>MO:</b> OK, so my first question is how important is it for the Command Team to interact with operators and maintainers, i.e. you guys. That means in-between the operations, during the operations. How important is it that you get lots of interactions from the XO, the CO. Is it important? Or do you just get on with the job?</p> <p><b>Pat:</b> It is important to know what is happening. I don't think you need any personal contact with them as long as you know what is happening on the ship and what routines are running, then I don't think you need..er..personal contact with them on a daily basis.</p> <p><b>Judas:</b> Depends on what class of ship you're on. Obviously if you're on something like a frigate, you will probably get something like a CO's memorandum telling you what the CO's goals and objectives is. But on a smaller ship, you're seeing more. You're seeing more, 'cos obviously there is only two decks and you're seeing more and talking about what you're wanting to achieve and things like that. On a bigger ship it gets filtered down through Command. You'd probably hardly ever see the Command, well....I wouldn't, not in my branch.</p> <p><b>MO:</b> OK. And that's OK is it? On a bigger ship, you would hardly ever see the CO and that's basically how it is and that's OK or...</p> <p><b>Judas:</b> Well, I mean...I don't think personally if it filters down through</p>

Command, you see what the CO's aims and objectives are.

**Suzy:** I found on the bigger ships, I didn't know what the bigger picture was. Which I thought was a bad thing personally.

**Taff:** It comes down to branch you're in on a bigger ship. My branch has a lot of interaction with the Command Team.

**MO:** OK.

**Taff:** You'll find that on ..er..no matter what platform you are on. That's it..erm..its really important to have like ..er...a lot of interaction. I think..my experience from bigger ships is mainly I suppose the lack of interaction between say.. the ME branch and the people who are erm...actually in the Ops Room, fighting the Ship. It probably comes down to be honest with you...you know...the individuals not wanting to go the extra mile to find out what is happening. I couldn't see a PWO (A) going out of his way to go down to the SCC to brief the ME department on what is going on. And I couldn't see an AB Stoker going out of his way to leave the SCC to walk up to the Ops Room.

**MO:** OK

**Judas:** I think overall...I mean....overall...you don't really get you know ...filtered down from Command. Because we don't really have much to do with the Command Structure, we just do our bit and don't really have a commitment at that end.

**MO:** Is that different on the ship you're on at the moment?

**Judas:** Yeah. And it depends what branch you're 'cos like Taff, he'll usually have more interaction with the Command, whereas I won't. Because it's not a necessity for me to have interaction with Command because from my perspective, its my job to turn, do my bit and carry out what the Command needs. There is no requirement for me to have interaction with Command at all.

**MO:** OK, anybody else?

**Stacey:** I think it would on bigger platforms be good for the CO to address the Ship at least once every two weeks or something. So that every branch gets to see him and see what he is like as a person as well because it is important to know what they are like as person. Whether you can trust them and you can't go on trust over a pipe or what decision has been made. You need to get to know them as well. Yeah, I think its vital that you get to see them quite...quite often. Because it makes your job easier. You think...I don't even know the guy but he's telling me to do something sometimes. I'm a steward and sometimes I think like that as well. How do you expect me to trust you and respect you when I don't even know you or see you 'round the ship.

**MO:** Oh, OK, right. Anybody else got any thoughts on that one? That's quite interesting.

**Pat:** Well in the respect that people work a lot better for you if they know you and they'll respect you from what you are doing and what kind of person you are. Whereas, if they don't see you and they just get the orders coming down, they'll ...might not give 100% or something.

**Judas:** There has been incidences where I have been on live operations and like the other ABs are going 'round the ship..like 'well what are we actually doing here?' Because they don't understand the whole....Because no-one's come out and said 'this is what we're doing,

this is what we are trying to achieve, this is what you'....not the whole but the individual as well, 'this is what you are contributing. But there's a lot of people just standing around saying 'what are we doing here?' Do you know it's like, it's like when they do their job and it comes off and they are successful and nobody says, 'well you done this job to provide such and such towards the outcome of this.' So they are standing around saying, 'right well, what are we actually doing here?'

**Nick:** But that can be long-winded: Like ' You provide...you maintain generators and generators power the sonar and that means that er..guys can sit in the ops room so they can stare at a screen all day' ...its so long winded.

**MO:** Yeah OK

**Taff:** I think its more down to..why were there doing what we're doing rather than er...you know..your job's...to make sure that the generators are doing their jobs to provide the wiggles [electrical power] that power my er..my equipment. And then, we've just ...we've just had an OST[Operational Sea Training] and a Joint Warrior [NATO exercise] and er...my job usually entails for me to really know what is going on most of the time..er..usually before the Command team does. But I didn't really know much of what was going on. I mean that Joint Warrior, I didn't know what the ...pardon my french...what the hell we were doing. [laughter]

**Stacey:** But the Command Brief on small ship is open for anyone to go to but on big ships it's not. So I think maybe that should be looked at: across the board it should be open to every one [agreement: yeah, yeah in the background]. You can go to it on small ships.[Background: 'I didn't know that'] It needs to be made more clearer.

**Taff:** I missed that.

**Stacey:** You can go to the Command Brief to know whats happening and then you are welcome but on big ships you don't get the option.

**MO:** Right OK, that's interesting.

**Pat:** I've only done a little bit on big ships but the Command Brief would be two-and-a-halfs {Lieutenant Commanders} and above or something wouldn't it? And then for us it would be...like I would go to the Command Brief and then I would tell my lads and then the lads would start chatting amongst themselves.

**Taff:** Well, HODS {Heads of Department} and key players I suppose.

Stacey: Yeah.

**Taff:** I mean..I've never been to a Command Brief on board but erm....

**Pat:** You're not missing much.[Laughter]

**Judas:** You tend to find that a lot as well. You have these briefs and two days later people are like: 'well what are we doing?' Like I say there's no follow up. Its like there are these stages. You have the detailed brief at the beginning, everybody knows what they have to achieve but there's no summarizing, there's no updates on the operation, so people are stood around like 'what are we doing?'..you know...'what are we trying to achieve, has the mission aim changed?' or anything like that.

**MO:** Right, OK. But you think that..I think you said that on a small ship it gets through regardless of the Command Brief issue?

**Pat:** Yeah, from the HODs, it will get down to the killicks {Leading Hands} and then down to the lads generally.



		<p><b>Stacey:</b> That's because its a smaller environmentt. I mean..can you imagine that on big ships on ...especially on Albion and things like that, it will never get down to people. Especially like chefs that are just stuck in the Galley all day and things like that. It is hard, though. I think the Command Brief shuld be open across the fleet.</p> <p><b>Taff:</b> On big ships, my experience is like....the off-going PWO or whatever would make a general broadcast pipe to keep the you know...Ship's Company updated on where we are and what we are doing and ...stuff. I do hear these pipes on small ships but I don't hear that many. I think on the OST that we just did, they were prompted more than anything to make these pipes.</p>
2	9:10.0 - 14:49.0	<p><b>TOPIC 2 – INTERACTION STYLES</b></p> <p><b>WHAT STYLE OF INTERACTION IS APPROPRIATE AND WHEN?</b></p> <p><b>MO:</b> OK, right thanks very much for that. Incidentally, I'm taking notes here and I am writing names down because when I listen to this back I'll obviously want to know who said what rather than...'cos some of the guys, your voices sound quite similar so I won't know whether you've spoken and then he's spoken or whether that was all you or what ever. That's the only reason. Er...right OK, well thanks very much for that. My next question is erm.. what kinds of interactions are appropriate and when...so if you think about when you are interacting with people be them...killicks, PO's [Petty Officers], Chiefs [Chief Petty Officers] you know...YOs {Young Officers}, right the way up to the Captain, I mean what sort of thing is appropriate? Can it be too familiar, can it be too directive? What are your views on that?</p> <p><b>Taff:</b> It's been picked up on our platform recently, for being too over-familiar...er....I ...I wouldn't necessarily go up to an officer and call them by their nick-name. Same as maybe....like a senior senior rate to call them by their nick-name. But Leading Hands, I don't see why I would have to walk around the ship and address them as like Leading Seaman or whatever. Erm...so that was picked up as practically the whole crew being over familiar.</p> <p><b>FAMILIARITY</b></p> <p><b>MO:</b> How would you feel if you were say, working with an Officer who was very familiar with you? Quite happy to use nick-names, to use his or her nick-name?</p> <p><b>Taff:</b> I would feel quite comfortable working with that person.</p> <p><b>Pat:</b> There is a time and a place er..to be formal. If its on a one-to-one basis and you know them, you can relax and you can call them by nick-names but if you are in front of higher-rankings and stuff like that, then that's a time to be formal.</p> <p><b>Judas:</b> I mean I have just personally...just joined this ship myself but I would think that my assessment is you shouldn't be over-familiarised with</p>

each other but er...that's definitely someone else looking in the ship, you think that but...if everyone else has been doing that and they know each other, they are going to be comfortable with that sort of familiarisation.

**Stacey:** But then on smaller platforms you work closer to the same people and its set in quite a small confined space isn't it? So you would get to know each other a little bit more than expected.

**Nick:** That's what makes it better.

**Taff:** Well, Yeah, I mean...

**Stacey:** Its a more relaxed environment to work in, I think. If you've got that bit of friendship there and a bit of a bond rather than just being a work colleague. I think it helps a bit.

**MO:** OK, thanks..oh, what were you going to say?

**Nick:** That's what I was going to say. I..er...would work better with say...officers, like say if they are addressed as say...gunnery, 'gunz' or 'navz', whatever. It makes me feel better to work with them than say, 'sir'...'ma'am'

**Anon:** Yeah.

**Stacey:** It doesn't feel so intense if you don't think, well..'ah, I've got to approach them with 'sir', 'ma'am' all the time. They're probably watching me 'cos even as a steward, I've been around some high offices and stuff but you're like that...you just think. I feel uncomfortable 'cos I've got to address them in this way...like...and things like that. Sometimes in a more relaxing environment its a lot better and comfortable to work there and not so tense.

**MO:** Right, OK. And how do you feel about that?

**Devo:** Well....I agree like...

**MO:** Yeah.

**Devo:** There's nothing worse than going 'round and er...like being ....stressed out... you can't.....you might as well be comfortable while working mightn't you?

**MO:** Right OK.

**Judas:** Makes people more approachable, say you DO [Divisional Officer] was more relaxed with you. You think: oh yeah, you've got a problem, you wouldn't even hesitate to go up and go, you know...'I've got this problem at home, I need help.' Whereas if he was more formal, you'd be like: 'oh no. I'm not going to see him, he won't really help me out.' and things like that.

**MO:** OK. Can I just pick up on that as well. That whole divisional side of it. Erm, so if you have an officer or a chief or something who is your DO and you're comfortable with them and they are accessible and all the rest of it and obviously that is the ideal from a a er...divisional point of view. Do you think, does anybody think that affects their work as well.

**Judas:** It would probably make you more productive. 'Cos if you were stuck and you needed advice because you know they would help you with advice. Whereas if you felt like you couldn't approach them, you would feel you are on your own and taking it all on board yourself. It also helps if he feels more approachable and you've got a more relaxed atmosphere 'round the ship, you can pick up if anybody's like ...got home troubles or things like that or things that are bothering them because you

		<p>are so close you can pick up on that a lot more easier whereas if you are a lot more stressed and things like that I think you would just ignore people. You just think, I won't talk to him...he's annoying me.</p> <p><b>Stacey:</b> I think it would be good for Divisional Officers if you find them approachable, it improves their confidence as well if people don't feel scared or worried to bother them or think it puts more work on them. Much better all round if you feel comfortable.</p> <p><b>MO:</b> Anyone else have any thoughts on that? Particularly how it affects you working if you like?</p> <p><b>Taff:</b> I think its a reality thing..its sort of...we live in a class environment..thing...in the armed forces er...and that sort of the classes doesn't really exist outside of the armed forces and er...its just those boundaries I think that er..I think we need to just to lay to rest sort of...but where to you draw it? Kind of thing...</p> <p><b>MO</b> Yeah...OK Thanks very much for that erm...</p>
3	14:49.4 - 25:28.9	<p><b>TOPIC 3 – INTERACTION AND PERFORMANCE</b></p> <p><b>HOW DOES INTERACTION AFFECT PERFORMANCE</b></p> <p><b>MO:</b> OK Right. Well this question I've almost partly asked but perhaps we can just look at this a bit more and that is: How does interaction affect the Ship's performance. So if you a Ship that on the one hand, you know the CO speaks to his HODS and the HODS speak to the Chiefs, well POs and so on down the line or say, a CO who tends to walk down the galley from time to time, talks to the people and that kind of thing . How do you think that would affect the Ship's performance in either case?</p> <p><b>Pat:</b> I think the more approachable CO who communicates more would alter the performance of the Ship. Because morale's better, its not as formal and people respect him for coming around and see him individually, you know what I mean it would increase the performance of the Ship. I think people would work harder for him.</p> <p><b>Stacey:</b> It makes the Ship Company think: 'ah, he's coming down to see us and have a chat one-on-one'. It makes you feel like..he cares about his crew not just the Ship and getting his next rate {rank}or whatever. I mean 'cos a lot of people do rate-chase and things like that and that's understandable, if they want to make a career. But its nice for your CO and the Command to make you feel welcome and that they care about you. And for your CO to come and speak to you and things like that and not through your department and that, its a lot better.</p> <p><b>Suzy:</b> The skipper on the Monmouth, he's just phenomenal, [CO's name removed from transcript] And ..er...he used to work his hardest...for us and we would work for him, the same way. It was small things like on a Friday afternoon, he wouldn't sit in a box off the breakwater, no he would get us alongside and he would push. And even little things like on the Staff Sea Check, we done BOST [Basic Operational Sea Training] with him and like for the Staff Sea Check, the weekend before, we would stay on board, digging out and he said, he dangled the carrot if we get this done and I'm happy with it, I'll let everyone go weekenders. It was that</p>

sort of attitude that that ship ended up...I think it was the first ship in 26 years to get a 'good' on BOST. And half the time, I think that was down to him and his leadership because you never felt like you worked for him, you felt like you worked with him. And that was as a baby stoker [junior marine engineering mechanic], you felt like that.

**Stacey:** It is good when you see officers actually on the upper deck scrubbing out with you and stuff like that especially in...er...when its a busy working environment and stuff its always good and always good for morale. 'Cos you can have a laugh with them aswell and things like that so...I think more of that..not stitching higher-rankings and stuff like that should at least be taken a look at that because in my eyes you can't expect someone to do a job you wouldn't do yourself.

**Suzy:** Honestly, its like with the two-ringers [lieutenants] and the er...subbies [sub-lieutenants] when it's like er..store ship. 'Oh I'm busy.' We're all busy and we're all eating this food.

**Stacey:** Yeah.

**MO:** OK

**Judas:** I was on a ship where..erm..the Daily Orders, the routine was changing throughout the day.Even though..er..it never matched Daily Orders and things. Secure {end of work} wasn't getting piped and things like that. And people kept going up and asking the XO erm..you know what sort of routine the Ship should be working and things like that. The XO then went to the Captain, he was complaining becасue everybody kept going up and asking him. The Captain came be in the end and he says 'well, you know the XO's getting bother and that.' Well 'to be honest sir, its the XO's job to run the Ship's routine so the reason people are going on at him is because no-one knows what is going on. If everyone knew and the Ship's routine was going via Daily Orders there would be no need to him every minute of the day'.

**MO:** OK, thanks, that's on the information side of it and Daily Orders.

**Judas:** yeah.

**MO:** OK Just going back to what you said about Store Ship and what you said that officers should help out and that sort of thing, Is it, I mean I'm not asking about your ship specifically but is it in your experiences, is that the norm or is not the norm that that would happen?

**Nick:** It doesn't happen that often but it has happened before. The same way as when you are ditching gash when get alongside after er.. a few weeks at sea its always junior rates...

**Stacey:** Yeah.

**Pat:**...ditch gash. Everyone makes the gash, everyone should ditch it.And things like that will get you a better working relationship

**Judas:** Sometimes its like an individual thng eh? 'Cos some people look and go 'Ah, I shuld be helping them do that' and they will actually come and help you. I think other people look and go 'Nah, I too good for that.' All it is basically, its an individual thing. I mean..for me it would be if I take sonebody like struggling with a job and I looked at him and I thought he's struggling, I'll go and help him with that but I wouldn't sit there and go like 'I'm too good to do that, I won't bother'.

**Group:** [Agreement, murmuring.]

**Judas:** Well that's what it is isn't it? If you take somebody, anyone in the

Ship's Company watching them Store Ship, he'd look and go 'hmm I should be helping them because I eat that food' so rather than go, 'No, I'm too good to go and do that.'

**MO:** OK, But that's about individual but do you think in your experience on all your ships where maybe one person leads by example and more and more people do it, does it happen more on some ships than other ships?

**Pat:** Some ships..well its different because obviously it depends on your Command Structure. Er..if the XO and like the Gunz and that don't do a Store Ship and the YOs join. They don't see them doing it, so they won't do it and it will just go like that from relief to relief and it will end up it will just be the lads but it depends on the structure.

**MO:** Does anyone agree with that or does anybody...

**Stacey:** Yeah.

**Nick:** Depends where you are. Because when I was on a ship before erm...I mean..Harwich I think it was. All the lads wanted to go out on the piss and the Wardroom {Officers} were like 'no, no secure, we're still working.' and we were sat there 'till six o'clock. But they were like 'no we're still working.' But the next week, we were in Portsmouth, the minute the Ship was on the wall, piped secure. We asked about the fresh water wash, they said, ah, the Duty Watch can do that.' They couldn't wait to get off.

**MO:** And what effect does that have?

**Nick:** Well at the end of the day, you think they just see the Ship as their plaything.

**Pat:** It lowers morale as well.

**Nick:** And if your duty that weekend and you've got the whole Ship to do a jet wash down you're like that, 'I'm putting no effort in'.

**Pat:** You get like lower results. It does affect performance, obviously.

**MO:** Right OK. Thanks very much, is there anything anybody wants to add on that?

**Suzy:** Same as what they saying, I think if there is continuity on something like that, if they had said when they got alongside in that first port 'right everyone go.' and you can go ashore and smash it in for the evening.

**Stacey:** Yeah.

**Suzy:** And but also when they got to Portsmouth and they say 'right well, the duty watch has got to do the upper deck wash down 'cos we are going to pipe secure early then the continuity is there. People will feel happier about it.

**MO:** Right OK

**Stacey:** It is sometimes, like when they feel like it.

**MO:** Right, so even if they were like quite hard-nosed about secure times and things like that but they were always like that regardless of the scenario, that's...

**Pat:** At least you know where you stand.

**Stacey:** Yeah.

**Judas:** That kind of incident makes it like us v. them kind of thing. Like we'll always help each other, we'll be like 'we'll work our hardest for each

		<p>other but those lot...no.'</p> <p><b>MO:</b> In that sort of scenario if you've ever been in situations like that where you know, like the Command Team are playing the Ship's routine according to their own aims or what have you as you have just described there. Would you say these sort of people would interact, are they people who would go down the galley or would they keep themselves to themselves?</p> <p><b>Stacey:</b> I think they are probably bitter and twisted.[Laughter] I think they are people who have not got what they wanted out of their career and so they become bitter and twisted: 'I'm here and therefore they can be here'. And I think it shouldn't be like that.</p> <p><b>Judas:</b> Sometimes...its just nuts [laughs] it irritates me sometimes because you know because I'm only an AB (Able Sailor) but it irritates sometimes, sometimes I just want to say, 'just stop thinking about yourself, think about other people'. A lot of matelots are not like that you know? But some people are like that.</p> <p><b>Pat:</b> Its one thing like when you pipe secure on the boat. Its like on our Ship, we've got not Officers of the Day [Duty Officers] that are RA [rationed ashore] so secure is often not piped until after 4, at some point. But if you go and pester them, then they pipe it at 4 but they won't go out of their ways to do it. I mean it's things like that because they don't see the benefit. It's strange then because like when you get to sea then and the XO comes around the mess and you get into a discussion about it, well some people perceive it as dripping [complaining]. It's like the Junior Rates are like 'well secure's not piped until after 4 o'clock' but matelots in general don't mind if you've got to work past 4 o'clock but you are actually working, most matelots won't mind When you are sat down the mess, watching the telly, waiting for someone to pipe secure at 4 and you know there is no work on and it's not getting piped, you think 'well, why?' ...you know?</p> <p><b>Nick:</b> And then that comes back to Daily Orders, if it's on Daily Orders, why do they have to pipe it? You should be able to provide your own routine, you know if you've got nothing on you can go.</p> <p><b>Stacey:</b> As long as your work gets done.</p>
4	25:25.0 - 44:45.6	<p><b>TOPIC 4 – CO'S AIMS AND OBJECTIVES</b></p> <p><b>HOW DO YOU KNOW WHAT THE CO'S AIMS AND OBJECTIVES ARE?</b></p> <p><b>MO:</b> OK. This my last one now really: How do you personally find out the Captain's aims and objectives? So an objective for a particular exercise or operation or even you know...a particular working day.</p> <p><b>Pat:</b> Normally it's on Daily Orders if it's a working day or LSP [maintenance period] or something like that. Generally when we sail on an exercise as we close up specials they'll put the Command Aim on the</p>

broadcast pipe er..and then once a day they'll reiterate the Command Aim or something like that.

**Nick:** Its the old: 'this is the Captain on the Bridge, the Command Aim is...'

**MO:** OK, and does that help? Knowing the what the Command Aim is?

**Pat:** There's not really that much information to be honest. 'Command aim is patrol such and such, speed required is 12 knots'. and that is all you know.

**Judas:** I mean that's what I would do, take bits from the Command Aim like maintain 12 knots that would be my contribution to the Command Aim.

**Stacey:** And you would find out more about it if you went to the Command Brief. Whereas on the big platforms you don't really have Command Briefs that everybody is welcome to.

**MO:** OK. Is there any other way that you find out , if you are in an exercise for example, you know what the Command Aim is but there are fires and floods and things, how do you know whether to pick up a DC wedge or a fire extinguisher, you know which is the more important?

**Pat:** The Watch and Station Bill, obviously you go there for your individual station and then if there is two incidents, you go to the FRPP [Fire & Repair Party Post] and they will prioritise.

**MO:** OK. And who do you get that from?

**Pat:** That comes from the DCO [Damage Control Officer] which is the XO.

**MO:** OK do you feel in your experience and we are looking at damage control exercises at the minute and maybe we will broaden this in a little bit. Do you think in this specific scenario that generally you know what the Command Aim is and what the priorities are? You know if you were in an incident, the DCO has fallen over, hadn't made a pipe in a while and you encountered a new incident, that you could make a decision as to which priority to deal with?

**Judas:** I think that's due to experience. Depending on what sort of platform you are on, if you had just finished your firefighting training and you were sent to say, Albion I don't think you could. Because you wouldn't have experience of the Ship, you'd have just joined, you wouldn't know. You wouldn't feel confident tackling a damage control situation like that.

**MO:** OK in a different scenario: if the Ship is alongside for a maintenance period and there are various things going on like problems with parts or stores, you've got to do a Store Ship and you've got to do a hundred things that week do you think that generally you would know from things like Daily Orders, Command Aims, things like that that you will know what's going on that week and what would be the highest priority.

**Pat:** I don't know about amongst the engineers but in the Warfare Department we have 'Both Watches'. every morning and every lunch time. Which I think is a bit excessive you should have it once in the morning [agreement] Aye. Because if they tell you something in the morning there's no point to tell you the same thing again in case because you've had your lunch, you've just forgot [laughter]. Yeah, for the Warfare Department you've got your daily jobs, you just crack on with that but I

don't know how it works for the other departments.

**Judas:** Its er..usually filtered down like in maintenance. Er yeah...like if we're in a maintenance period now. So months beforehand various branches of the Ship's Company will come up, 'we need this job done, we need that job done. The MEO [Marine Engineering Officer] will then put the maintenance package in and then he'll say to us 'right this is the maintenance period this is what is being done and what we will contribute towards it.

**Pat:** And you've got things like your LSP meetings where you find out what meant to be happening.

**MO:** Any other ways of finding out what the Command want in any given situation?

**Scouse:** I'm new to the Ship to be honest; you know just getting to know my way along. I just like to be told what to do. [laughter].

**MO:** Just because you are finding your way around?

**Scouse:** Yeah, I just like to be told what to do and get on with it. It doesn't really bother me.

**MO:** OK so you're not really bothered about people coming down and talking to you in the mess or in the galley or whatever, you just read Daily Orders, do it, happy?

**Scouse:** Yeah, yeah yeah.

**MO:** OK. Anybody agree with that or...

**Pat:** Well...I mean he's only been in the Navy less than a year haven't you?

**Scouse:** Yeah.

**Pat:** You will learn with experience.

**Scouse:** Yes.

**Stacey:** You'll start to do things off your own back like: 'I need to do this, I need to do that.'

**Scouse:** Yeah but I am happy doing that but it doesn't bother me.

**MO:** It doesn't bother you?

**Scouse:** No not really, I get told to do something I just get on and do it.

**MO:** OK.

**Judas:** Its sort of like if you understand more about the Command Aim it makes you a bit more pre-emptive like the bigger picture, so to speak. So if you know the CO wants to achieve such and such you're kind of switched on about it. You can think well that, sounds like me doing this or that to help the CO achieve his aim. Whereas if you're waiting for somebody to say do this or do that, you should be more pre-emptive.

**Pat:** There again that comes down to Both Watches in the morning because they detail us off for individual jobs. I listen, then take my lads away and then we crack on with our stuff.

**MO:** Has anybody been in a scenario where they do the Asymmetric Threat but where from a Rules of Engagement side of life, where you find yourself in a confused situation where you do not know where the threat is going to come from and its come down to one person to make that decision to potentially engage with it. How do you find out what the Rules of Engagement are and what the Command Intent is?

**Taff:** Well in a Force Protection Exercise. Erm...and stuff like



that...We're told that er...the priority to the weapon system is that we are a Command weapon. My interpretation of that is I won't fire at a target that I am not told to fire at. But we're also told that if we feel threatened you can override that and use the weapon as a personal weapon in self defence. I've never had to do that for real, I've closed up as weapons crew both coming in and coming out of Bahrain and other Gulf Ports both on smaller and larger ships. I've never had to put a round down. I think its a bit excess...er...I think when it first went out there there was a major emphasis on Force Protection, I think a bit too excessively. I don't see why we have Force Protection Teams closed up for a military port, you have people there, armed boats in there.

**MO:** I'm just wondering, I'm thinking that situations change, your interpretation of the Command Weapon protocol is absolutely correct but I'm thinking I've been in scenarios myself where there has been quite a confused picture so increasingly people are being relied upon to make decisions on their own, does that change how the Command Intent is passed on? I mean going in and out of Bahrain as you say, peace time activity but could get out of hand quite quickly?

**Taff:** Well it can. We know there is a lot of terrorists out there, want to do us harm and their main way of doing that at the moment is to drive a fast boat into the side of us. I don't think anyone has been in that situation, I haven't heard of anyone who has been attacked by a skiff or something. When I was in Cardiff I don't know what we were doing but I wasn't a gunner back then I was just in the MCO [Main Communications Office] and we were going back and forth through the straits of Gibraltar constantly escorting the Ark Royal and the RFA [Royal Fleet Auxiliary] and I got a signal in the MCO from the RFA saying they had a fast moving contact and I just ripped it off the tele-printer and rushed it through the ops room next thing I know the Ark had gone to Action Stations but apparently it was like a drug runner or something. I don't know if there was a fire-fight, I've got no idea but personally, I have never been in a situation like that.

**MO:** Maybe if no-one been in that situation, it's an unfair question, I just wonder whether people felt that how the Command Aim was passed on in that situation?

**Pat:** You would need a full briefing before you...

**Stacey:** yeah.

**Pat:** If you going into a risky area, you would need a Command Brief for that area with your key players ie guns crews, upper deck crews, lookouts and that would need to be quite an intense brief.

**Taff:** The Ship would do that as part of its defensive posture er...that's why we have different manning states, defence watches and all that. If we were going to do a certain job, I don't see why we would, if we were just cruising around and doing say, Fishery Protection, I don't know, I've never done Fishery Protection but they probably do do defence watches at Fishery Protection, I've got no idea but I don't see why you would need to do defence watches in Fishery Protection.

**Pat:** But that aspect of the Command Brief is the most important obviously because ROE [Rules of Engagement] is still an individual decision isn't it? Unless you get tasked to fire a Command Weapon then

ROE is up here if you feel threatened and its legitimate to shoot then.

**Taff:** Yeah, If I had a contact on and the Gunnery Officer didn't acknowledge me when I reported it and again and he still didn't acknowledge me or you know...make a decision on it and the contact was still coming in and it's my arse and its my decision and I'd like to think that my instinct for self preservation kick in and er.. I'd have no doubts that I would pull the trigger.

**Suzy:** On the ROE and the Force Protection side, I've got absolutely no confidence of the Royal Navy or the British Government being on your side. I think they would hang you out to dry in a second.

**Judas:** A few of my friends in the front line infantry in the Gulf and things like that and they got ..a lot of them got a bit skippy about the orders they were being given and they actually started keeping written logs and diaries about every single order they were given, especially one regarding firearms ..things like that. Because I mean, even if you attend an ROE course now you are always told it's like...it's your decision whether you fire or not it's up to you. I can see the perspective on that you know, someone whose higher in rank going to make you fire...but a lot of people just don't have confidence in ROE at all. I mean they are constantly telling you yeah 'as long as you act in the ROE, you'll be fine.' and the Navy will back you up and that but it's like in these incidents how long are you going to have to think OK it's safe to shoot.

**MO:** OK the bit I would be interested in there, because I mean I am not involved in ROE policy but I am just wondering how do you think the Ship can kind of support people in that role because you have got sailors with guns and they are on the edge of the network but they have got an individual decision to make, how are they supported by the rest of the network?

**Nick:** From my point of view I would always feel better if the visual [visual weapons director] knew what he was doing. [laughter] Some of the stuff you hear on the radio, they talking absolute shit. I have some really good gunnery officers and then I have had some that were slow to get up to speed or they have just been blatantly shit, I don't know if you can weed them out but you feel better if they are stood there talking the right stuff, giving out the correct orders...

**Taff:** I think he can only do his job if we provide him with the picture ...I mean...on the sweepers our equipment ..the bridge team are not going to see an aircraft on the radar it's going to be a lookout on the bridge or whatever..it's going to be an upper deck guns crew that reports to him and then it's up to...once he's got it, it's up to them to make a decision whether it's hostile or what erm....

**MO:** Are you saying you rely basically on what you have been trained on your SPO[Ship's Protection Organisation] course.

**Taff:** Well yeah, you rely on your training obviously.

**MO:** What I am asking is do you rely on that more than direction from the Ship?

**Taff:** Unless I felt personally threatened I wouldn't fire. Er...sorry, not unless I personally felt threatened ...if I was like P2 [weapon position] and I thought P1 was in danger I'd fire but I wouldn't fire unless I was told to really.

**Judas:** Its all the grey areas with ROE. You go up on the SPO course and they are like 'as long as you are in the ROE you're fine' but its the other stuff that encompasses that like say, a guy walks past with a handgun and you feel threatened and you shoot him. Then you go to court and the Lawyer goes 'well, why did you shoot them?' If the prosecution says 'why did you shoot him?' and you go 'well he's got a handgun.' 'Was he shooting at you?' 'No.' You don't get that on SPO course.

**MO:** Do you not?

**Judas:** Not on SPO course it's all that...you see what I mean.

## **ENDING QUESTION**

## **LAST POINTS / CONTIBUTIONS**

**MO:** Right OK.I will leave at that unless anyone has anything they want to add on interaction. Does anyone have any particularly strong views they feel about teamwork, interaction on ships.

**Suzy:** Just what Nick was saying about the visual...on Force Protection exercises we did a little while ago it was horrendous.

**Pat:** Yeah you gotta have confidence in your superiors .

**Suzy:** And I noticed when they start to fuck up, they start shouting and flapping , trying to make it look like you're the one who has got something wrong.

**MO:** Right OK, thanks very much for that. Anything else?

**Judas:** I just think the whole thing with that...leadership and that I mean when the Continuous Attitude Survey Report came out in Navy News last ...well this month erm...all in all people were happy with the Navy and the Naval Service but I think the big question mark hanging over was 45% of ratings feel undervalued. I mean everyone was happy with the drafting {posting} system even with the manning and the demand thats on at the moment but almost half of Naval Ratings felt undervalued on every unit and platform so I mean that tells you something about Patt: If you feel undervalued then obviously you're not going to be performing like you could do.

**MO:** Anything else....no? Well thank you very much guys, it was a bit shorter than I thought it was going to be but to be honest that was very informative and interesting.

## INTERACT FOCUS GROUP 2 – TRANSCRIPT

DATE 23 May 2011

VENUE Maritime Operations Centre Room 220

### PARTICIPANTS

Name	Gender	Age	Consent
Chuck	M	26	√
Joe	M	30	√
Ryan	M	19	√
Mouse	M	24	√
Callum	M	32	√
Stu	M	24	√
Gaz	M	23	√
H	M	22	√

	Timespan	Content
1	0:00.0 - 1:20.8	<p><b>TOPIC 1 – THE VALUE OF INTERACTION</b></p> <p><b>HOW IMPORTANT IS INTERACTION?</b></p> <p><b>MO:</b> OK, so ...erm...focusing on interaction on ships so my first question just to get the ball rolling then is how important do you think it is for the Command Team to interact with Junior Rates. Anyone can come in on that one...</p> <p><b>Chuck:</b> Very important.</p> <p><b>MO:</b> Yeah?</p> <p><b>Chuck:</b> Yeah, definitely.</p> <p><b>Mouse:</b> The younger lads especially need to know they can speak to the Captain.</p> <p><b>MO:</b> OK. Is everybody in agreement with that one?</p> <p><b>All:</b> Yeah, Yeah, Yeah.</p> <p><b>H:</b> They are a lot more approachable, being on a small ship. When you are on the Bridge and you've got to make reports to the XO, Captain. If they more open, you feel you they are more approachable, you make reports. Or else you sit back in a corner and hope someone else does it. Especially going from big ships like to small ships its much easier to make reports. So its better on small ships than big ship,</p>

		<p>personally I think that's what you need anyway, I'm a small ships person.</p> <p><b>Chuck:</b> Its better on small ships.</p> <p><b>MO:</b> I'm just going to write down the order that you are speaking in. I'm not going to write anything else, but I just need to write down the order because er.. otherwise when I am listening to this I won't have a clue who said what.</p>
2	1:20.8 - 4:12.2	<p><b>MO:</b> So just to go back on that You seem to be saying that it is different on small ships than to big ships. Do you think it is better on small ships than big ships or do you just think it is two different cases, two different leadership styles and that's how it should be?</p> <p><b>Chuck:</b> I think it would harder on big ships, they have more crew than ours but if it could be different on big ships, more like small ships, it would make it better, more enjoyable.</p> <p><b>Ryan:</b> Yeah and it would make it relaxing and more comfortable.</p> <p><b>MO:</b> Do you think if it was more relaxed, you would get more done, there would be better productivity?</p> <p><b>Chuck:</b> Not really no. You've got your Heads of Department that really run it....</p> <p><b>Joe:</b> On a bigger ship I don't think your Officers and that really get involved in what happens, the day to day stuff, that's more your Heads of Departments, your Senior Rates and that. I don't think the work would be affected.</p> <p><b>MO:</b> Anybody else want to add anything to that?</p> <p><b>TOPIC 2 – INTERACTION STYLES</b></p> <p><b>WHAT STYLE OF INTERACTION IS APPROPRIATE AND WHEN?</b></p> <p><b>MO:</b> OK. So what kind of ...so well...your saying that there's more interactions and that makes you feel at ease, so what kind of interactions do you think are appropriate and what are not, so if the Captain comes down the Galley and talks to you, what kind of style should the Captain use, what sort of things should you talk about?</p> <p><b>Joe:</b> Er...well...he does come down the Galley and he talks to me about anything, what the Ship is doing, why the Ship's not doing something or whatever, it's good to know what the reasons are for things not happening or things happening. And then he talks about family stuff as well.</p> <p><b>MO:</b> OK and the information part of it, that's useful I guess..What about when you are talking about families, sport and stuff like that? Is that useful, is that helpful? Is it good or bad?</p> <p><b>Chuck:</b> Yeah, it's good. It shows that they've got a normal life as well. Some of the younger lads...especially when I was younger, you just see them as a Captain. You don't take into account that he's got a wife</p>

		<p>and six kids or whatever. But when he comes and talks to you about what he has done at the weekend, what he's got planned you kinda just see him as a normal person, just like yourself. But obviously with a bit more responsibility.</p> <p><b>MO:</b> Uhuh. Anybody else got anything to add on that. As I said before, I won't agree or disagree with any of this.</p> <p><b>Callum:</b> I think it's better when the Captain comes round 'cos then you've got an idea what's going on, its better when you know what's going on.</p> <p><b>MO:</b> Does anybody generally agree with that or...</p> <p><b>All:</b> Yeah, yeah.</p>
3	4:12.2 - 5:12.6	<p><b>TOPIC 3 – INTERACTION AND PERFORMANCE</b></p> <p><b>HOW DOES INTERACTION AFFECT PERFORMANCE</b></p> <p><b>MO:</b> And how do you think interaction affects Ship's performance, if you have a Captain or XO or whatever, you know, HODs {Heads of Department} that interact with you, that that affects performance, that that improves performance?</p> <p><b>Chuck:</b> I feel much happier about it, much happier.</p> <p><b>MO:</b> OK, anybody else?</p> <p><b>Mouse:</b> Yeah, if he's showing his knowledge of something. I mean you assume becasue he does a totally different job to us that he's stood there, he's blanking it out. If he speaks about it he's... your getting an understanding that he knows why your there....you're more inclined to open up and give him the truth.</p>
4	5:12.6 - 9:00.1	<p><b>MO:</b> And should those relationships with the CO, XO or HODS, should they be formal or informal?</p> <p><b>Ryan:</b> I think it depends on what you are talking about. I mean for some things you want to keep to yourself. Like you don't want to say to them, you went out at the weekend and you did something daft. Whereas when it comes to work, you're happy to talk to them.</p> <p><b>Mouse:</b> I think it's a stranger situation on a small ship, because one officer can have a few different roles. So on one hand you need to let him know as your DO[Divisional Officer] that you've done something ashore in another role you think you'd rather not have him in that, like your professional working role, so you've got to try and gauge the right amount of information you can share.</p> <p><b>MO:</b> OK, can I just ask that question around the table, so what do you think, do you think it should be formal or informal?</p> <p><b>Callum:</b> It depends what circumstance. Obviously its got to be formal sometimes. But you've still got to be able to approach them when needed. That's the key sometimes. Not to be too stand-offish. And it's very difficult in er..not just the Wardroom [Officer's Mess] but Senior Rates as well if they seem very stand-offish it does seem a bit 'them and us' sometimes. Sometimes it's good, we know where that</p>

		<p>relationship is between us and senior personnel. Sometimes it can be quite [laughter] difficult and awkward it's just getting that fine balance. I think from their point of view it's hard to get that balance as well.</p> <p><b>MO:</b> How about yourself, formal or informal?</p> <p><b>Stu:</b> I would think it would depend on the situation, you're talking to them, say you've done something wrong, then it's going to be ....formal chat...shut door [laughter]. It's good to be informal sometimes as well, so you know they are normal, you don't want to believe that they are totally different.</p> <p><b>MO:</b> Thanks and just to make sure, you're Gaz aren't you?</p> <p><b>Gaz:</b> Yeah, Gaz...its just er...bit of both. A boundary during the working day but obviously they need to er..be approachable and speak to 'em,</p> <p><b>MO:</b>OK, anything to add to that?</p> <p><b>H:</b> No. I mean like er there's a fine line between the two? Formal and Informal. When you are on the Bridge or something obviously you need to be a bit more formal about what to report and when to report it and stuff but you have to be able to have an informal chat as well. It does help pass the time and they are approachable.</p> <p><b>Chuck:</b> Erm...I would say its better to be formal most of the time I mean they are Officers at the end of the day I think people can get too friendly sometimes, I mean..you can get further in the shit..and you will get and it's like they have to be formal..sort of thing.</p> <p><b>MO:</b> So you think they have a job to do, so it's better to know where you stand?</p> <p><b>Chuck:</b> yeah.</p>
5	8:57.5 - 9:41.1	<p><b>TOPIC 4 – CO'S AIMS AND OBJECTIVES</b></p> <p><b>HOW DO YOU KNOW WHAT THE CO'S AIMS AND OBJECTIVES ARE?</b></p> <p><b>MO:</b> Erm..so that was like the first big question, so my next question is how do you personally find out what the Captain's aims and objectives are, how do you know if its a period of maintenance or its a Force Protection exercise, how would you know what the Captain wants?</p> <p><b>Ryan:</b> Er..the main way would be Weekly Planners once every week and er...its get passed down through our HOD [Head of Department]on board and they'll let all their Junior Rates know.</p> <p><b>MO:</b> OK</p> <p><b>Calum:</b> Make pipes, 'the Command Aim is' at certain points.</p>
6	9:41.1 - 13:42.8	<p><b>MO:</b> OK, how useful is that?</p> <p><b>Chuck:</b> Not that useful because it tends to be the same all the time doesn't it?</p> <p><b>Callum:</b> Yeah because everyone knows anyway or tends to know what to concentrate on, you know our primary role....</p> <p><b>MO:</b> How do they already know?</p> <p><b>Callum:</b> Well, just what we're doing at the time. I know that during OST [Operational Sea Training], they'll concentrate on us and ask</p>

		<p>'what's the Command Aim?' And you can pretty much say it verbatim all the time. But sometimes are so busy they just say 'ah!' and it goes over their head. You know, 'what was that pipe?' [Laughter] And then they ask you and you go, 'er..not too sure.' But er..</p> <p><b>MO:</b> Anybody else got any feelings about that?</p> <p><b>Gaz:</b> I don't think it does help that much because like you just get told a job to do. And it doesn't matter the overall picture, you're still doing this job.</p> <p><b>MO:</b> Anybody else?</p> <p><b>Gaz:</b> I'm only learning, I've only just joined the Ship.</p> <p><b>MO:</b> OK, have you had any other Ships?</p> <p><b>Gaz:</b> No this is my first Ship.</p> <p><b>MO:</b> OK, bit unfair then, maybe [Laughter] Don't worry I won't pick on anyone, if I do just let me know.</p> <p>OK do you think then, I mean there are other means aren't there? Like Daily Orders and stuff like that. Does anyone feel that those methods are sufficient for you to know what is going on and what you would be expected to do?</p> <p><b>Chuck:</b> They are to a certain extent but small ship's programmes change all the time. One minute you're about to do this next week and then on Thursday afternoon, just before you're about to go weekenders the programme changes and you're now at sea for two weeks rather than one week just at the drop of a hat, kind of thing. So you've got your Daily Orders and you've got your Shortcast but to me, it doesn't mean anything its something to go home with and say I might be doing this in a couple of weeks but until you're about 2 or 3 days away from it...Like today, we were meant to be at sea but it changed straight away, obviously you cannae ...the weather's a different thing.</p> <p><b>MO:</b> Yeah, OK. So how do you feel about if things changed, if they have published this is going to happen on daily orders and then different things happen, the programme changes and so on, how do you feel about it?</p> <p>Mouse: Its piped {broadcasted} anyway to say that...</p> <p><b>Gaz:</b> I think if it's distributed well.</p> <p><b>Chuck:</b> It tends to change all the time so you don't really believe its happening until its happenning if you see what I mean.</p> <p><b>MO:</b> Sorry what were you going to say:</p> <p><b>Mouse:</b> Yeah, I mean a pipe is made if there is a change to Daily Orders, change in timings things like that....</p> <p><b>MO:</b> Does that work pretty well?</p> <p><b>Mouse:</b> Yeah</p>
7	13:42.7 - 15:59.2	<p><b>TOPIC 2 – INTERACTION STYLES</b></p> <p><b>WHAT STYLE OF INTERACTION IS APPROPRIATE AND WHEN?</b></p>



		<p><b>MO:</b> Different Command Teams have different styles, I don't think that's a big secret, so some will be formal, others quite informal. So if you are getting a new joiner, could be a HOD or XO [Executive Officer], CO whatever, how do you guys find out what that guy's style is like?</p> <p><b>Stu:</b> You normally find, you get a new XO and some of the lads have already met him but obviously you don't know until you find out for yourself.</p> <p><b>MO:</b> OK so is there any discussion about it?</p> <p><b>Stu:</b> Just general chit-chat [agreement].</p> <p><b>MO:</b> And what are you hoping for?</p> <p><b>Ryan:</b> I think...Nice guy [laughter]</p> <p><b>MO:</b> Yeah?</p> <p><b>Ryan:</b> Just someone who is er...</p> <p><b>Chuck:</b> Approachable.</p> <p><b>Ryan:</b> Approachable. Someone who treats the personnel...well. You know that's the main thing to be honest.</p> <p><b>MO:</b> Everyone agree with that? [agreement] OK. How do you as a Ship's Company...once they have been there a while...how do you come to a view on somebody? You don't have to say anything controversial or at all, it's all confidential anyway..but could be a good guy..</p> <p><b>Ryan:</b> Its usually in the mess you'll discuss, just from what they do and how they conduct themselves. Obviously people talk....</p> <p><b>Calum:</b> Everyone's got their own opinion at the end of the day.</p> <p><b>H:</b> Could be everyone likes him but if he's pulled you up for something or picked you, you might not like him. I think for everyone its going to be different really.</p> <p><b>MO:</b> OK, anyone else on that?</p> <p><b>Ryan:</b> I think that obviously your opinion can change on a day to day basis or longer depending on how they are reacting or depending on how their week is going</p>
8	15:59.2 - 17:39.4	<p><b>Ryan:</b> If they are having a good week or a bad week could dictate how they are getting on with people.</p> <p><b>MO:</b> So there could be an incident which changes your opinion?</p> <p><b>Ryan:</b> Yeah.</p> <p><b>Calum:</b> I think people in the mess when they voice an opinion might change other peoples' opinions. You might tend to agree or say things that they might not feel themselves but to be a part of the mess. Part of the group.</p> <p><b>MO:</b> So there is a sense that you've got your opinion but then there is a group opinion as well?</p> <p><b>Callum:</b> Yeah</p> <p><b>MO:</b> That's quite interesting, but has anybody got anything to add on that? ...OK so how do you deal with someone that ..hypothetically.. who doesn't meet your criteria, is not approachable perhaps a bit dominant or something like that. What can you do about that individual?</p> <p><b>Joe:</b> Get away from them.</p>

		<p><b>Chuck:</b> Try not to interact..well obviously you've got your work and that comes first, I mean if you don't like somebody or you choose not to...you just try and avoid them. Like personally wise but work wise you're just going to have to deal with it.</p> <p><b>MO:</b> OK anything else.</p>
9	17:42.0 - 18:40.6	<p><b>Callum:</b> I think it does effect if someone is not approachable and you're not comfortable, they're a bit domineering or whatever the way they conduct themselves, it will affect the way you perform.</p> <p><b>MO:</b> OK, you're saying that someone is over dominant..</p> <p><b>Ryan:</b> You would give them the bare minimum wouldn't you? I mean you would feel as if you are walking on egg shells. If he was your boss and details you off to something and you are working away. You would be thinking is that up to his standard, am I waiting to get bollocked kind of thing.</p> <p><b>MO:</b> OK. Anything else....Has anybody been in a situation where they have spent a long time with someone who is charge of them that they just don't feel comfortable with?</p> <p><b>Joe:</b> Yeah. I've had that before where one my jobs before but everyone who worked for that person</p>
10	18:40.6 - 22:16.7	<p><b>Joe:</b> ....was the same. I ended up on a DO's warning because of it. And then I went to work for another killick [leading hand] and that was it, fine. Just that one person.</p> <p><b>MO:</b> so how did you deal with that day in, day out?</p> <p><b>Joe:</b> Well, I used to speak to your killicks, the other killicks and they try and help you through, help you out a wee bit and it's not that bad anyway you're only working with them for a while. You just have to get on with it.</p> <p><b>MO:</b> It's an interesting thing that, there are obviously two ways of dealing with it. You can either try and do something yourself or what you've suggested there is to rely on the Divisional System. So do you guys feel that you can rely on the Divisional System, its useable :</p> <p><b>Ryan:</b> I would say it is.</p> <p><b>MO:</b> And that would be your first point of contact?</p> <p><b>Joe:</b> Yeah.</p> <p><b>Chuck:</b> I don't think it is.</p> <p><b>MO:</b> No?</p> <p><b>Mouse:</b> Well it depends, obviously you are different, all of us have Divisional Officers, young officers, it's their first job on board They've got so many jobs as we've said before, different jobs and they are struggling, so that gets to the back of the pile.</p> <p><b>MO:</b> So is it a credibility thing?</p> <p><b>Mouse:</b> Yeah.</p> <p><b>Chuck:</b> If you've got a divisional officer and he's 18, 19 years old and your 30 and you've got a problem and your supposed to use the Divisional Structure. Is he going to go to say, a WEO[Weapon Engineering Officer] whose been in for 25 years and tell him how it is Or maybe he is going to be like that [gestures to indicate ambivalence]. And it comes down to intimidation again If that YO [Young Officer] is quiet because he is just learning his trade which</p>

		<p>most of them are, you are not really going to stand up for yourself.</p> <p><b>MO:</b> OK, anybody else?</p> <p><b>Mouse:</b> My divisional officer is the MEO {Marine Engineering Officer} and I work with him everyday so...</p> <p><b>MO:</b> So you are happy to use the Divisional System?</p> <p><b>Mouse:</b> Yeah.</p> <p><b>MO:</b> Can I just ask that question around the table? Would you use the Divisional System?</p> <p><b>Gaz:</b> Er....yeah. It depends if they are a Young Officer, if they were younger than us I wouldn't go for a Divisional,, I wanna go to someone who is more experienced than myself as opposed to someone...I'm not saying they couldn't sort the problem but I would prefer to go to someone with more experience than myself.</p> <p><b>MO:</b> OK.H?</p> <p><b>H:</b> Yeah I think I'd agree but the WEO's mine and he's got more experience so...</p> <p><b>Chuck:</b> I've got the WEO, so I'm confident going towards him.</p> <p><b>Joe:</b> Yeah, my DO's only been in for 2 years, so I'd make him aware but I wouldn't expect him to follow it up. I'd probably go to someone with more experience.</p> <p><b>Ryan:</b> Yeah, I think I'm the same, I think I would go to one of the other crew. I've gone to my PO [Petty Officer] before</p>
1 1	22:16.7 - 23:03.6	<p>....Not just due to experience but maybe because I'm closer to them as a friend rather than just a work colleague.</p> <p><b>MO:</b> So its approachability and experience?</p> <p><b>Joe:</b> Yes.</p> <p><b>Mouse:</b> yes I would agree. In the past I've been to my Divisional Senior Rate rather than my Divisional Officer, because she's only been in for 2 years. But my Divisional Senior Rate has been in 10, 12 years.. The problems I have had before he's come across more easier to speak to.</p> <p><b>MO:</b> OK Thanks.</p>
1 2	23:03.5 - 24:03.6	<p><b>TOPIC 3 – INTERACTION AND PERFORMANCE</b></p> <p><b>HOW DOES INTERACTION AFFECT PERFORMANCE</b></p> <p><b>MO:</b> Right and how can the Command and by that I mean the Command Team, not just the Captain, also the people around him, how can they use interaction to wins hearts and minds?</p> <p><b>MO:</b> OK, difficult question. Er...</p> <p><b>Mouse:</b> To be honest, try not to mess you around?</p> <p><b>MO:</b> Not mess you around?</p> <p><b>Mouse:</b> Yeah.</p> <p><b>Gaz:</b> They've got to be clear and give you as much warning as possible when they change things. Information, information is important.</p> <p><b>Mouse:</b> Just being straight with you. When something has come up</p>

		the pipeline, when the Command Team has been made aware of any programme changes prior to us. So you could be sat there thinking we've got a nice easy week coming up soon, they're sat up on 1 deck thinking, ha, now we're going to sea for 3 weeks. They should come out with it straight away. Sort of let you know and then
1 3	24:03.6 - 25:41.3	<p>..you can get on with your stuff.</p> <p><b>MO:</b> Yes. Anybody else?</p> <p><b>Chuck:</b> Just what they said to be honest with you. Rather than delaying it and delaying it and delaying it and then telling you just a day or two or even a week or so.</p> <p><b>MO:</b> So that's all relating to information. Just giving you the information up front and not delaying on the information.</p> <p><b>Chuck:</b> So like Mouse said there when there is a change sometimes the Senior Rates don't know until the same time as us. Whereas surely, like obviously me and Jo, we both go to Weekly Planners and it tends to come out there and we kinda pass it down but it would be good if as soon as they found it out, they passed it on to the Senior Rates and they could get there team together and say 'look. there's a possibility this might happen but just be aware of it.' Rather than saying 'Do you hear there, this is the Captain with a programme change' it just instantly puts a dampener, 'cos whatever it is its going to be not what you want to hear really. Whereas if they give you 2 or 3 weeks notice you let other halves and your family know, you can start planning, 'right, I'm going home this weekend, rather than some people might leave it to the end of the month and say that's my weekend home but before that they're like right we're at sea that weekend and you've sacrificed 3 weekends for one weekend and then you find you're at sea that weekend. I mean its sometimes 6 or 7 weekends before you get home.</p> <p><b>MO:</b> Right OK, If you could write a list of effective things that on leadership onboard your ship, things you would like to see?</p>
1 4	25:28.9 - 33:06.6	<p><b>Joe:</b> As long they act one way with you. They try and be your best mate and then..I mean once the Captain was in, she came in and then goes away and tells the XO, I've seen this, seen that ..go and get it sorted and him running down which is..bollocks [Laughter]</p> <p><b>MO:</b> Sounds like you've had experience...</p> <p>Joe: Yeah ...It sort of puts you off talking to them.</p> <p><b>MO:</b> So basically they come down the mess and be all pally with you then go back and report...</p> <p><b>Joe:</b> Yeah, smiling assassin.</p> <p><b>MO:</b> OK, anybody else?</p> <p><b>Mouse:</b> I find a lot of them, they won't use the Divisional System the other way 'round. That's how a lot of information gets out, myself and Ryan are QM's [Quartermasters] and we'll be on the bridge, they seem to forget you're there so you're overhearing a phone conversation so you like, 'What's he on about there..going to sea on the 16th, we're alongside for 6 weeks.' And suddenly the whole programme being discussed by an AB [Able Seaman]telling what he's heard to a PO [Petty Officer].</p>

**MO:** Right OK, so it ends up reversing itself?

**Mouse:** Yeah.

**MO:** How important do you think that it is that the Command Team win hearts and minds? Is it important for the Command Team to be not necessarily liked but respected?

**Mouse:** I think respect is a big one. I just think they should consider us all. There is time when just about to chuck your civvies [civilian clothing] on and you're thinking 'ah I'm just going down the gym' or 'I am going ashore.' And someone will come along and say 'ah, I need you to do this for tomorrow.' If you don't respect the guy, or you don't like him, you're like 'ah..fuck him! I don't care if that's not done tomorrow'. But if there is some respect there ...you're more inclined to think 'yeah, I'll do whatever for him.'

**Callum:** Yeah, I think that's true, there should be more emphasis on how you approach things. The way things have been working it seems to me it's them and us. It seems to be 'you, just crack on with it.'

Whereas if they are more sympathetic, they'll keep their personnel more happier and then in the end we'll be more effective, we can get more influx into the system. Especially on a small ship ...er...er..its a small crew so you need more input, everyone using their own brain to think things through and it will be more er..successful as the Ship can be. I know sometimes there is a Command System but sometimes it needs a bit of help. Depends how you develop as well..erm..on board. They are confident in a job and you are as well.

## **TOPIC 4 – CO'S AIMS AND OBJECTIVES**

### **HOW DO YOU KNOW WHAT THE CO'S AIMS AND OBJECTIVES ARE?**

**MO:** That was something I was going to ask about. If you have information coming to you formally as well as informally, so you know what the Command Aim is, you've read Daily Orders but you also talk to the HODs and that sort of thing so you've got all this extra information so in this exercise, we are trying to achieve this as well. Do you think that will help you if you get into a situation let's say a firefighting situation where you are the guy on the ground, you've got to make a decision, do you think those interactions will help you make that decision?

**Callum:** Hmmmm [Laughter]

**MO:** Let's say you go into a compartment and there is a fire raging, there's a flood over there or something like that, how will you know what the priorities are? Is it all from the Command Aim, Daily Orders, Briefings?

**Mouse:** Yeah obviously the Command Aim goes to the whole ship, through the DCO [Damage Control Officer] but at the scene at the time, It would be down to the individual personnel to deal with that. Normally faced with an event like that, nobody knows what they are

		<p>going to do at the end of the day. Obviously the training you do and you go through it exactly the same the system that you use but in the actual event it's not going to work like that.[Laughter] It will change things and it will be down to people on the ground.</p> <p><b>MO:</b> I've not phrased the question very well. What I'm trying to get at is: Obviously you have certain information that is going to help you make a decision, it doesn't have to be a fire, it could be a force protection exercise or anything and a lot of that information comes formally, through the DCO, pipes and so on But I am just wondering whether you feel that the interaction you have had help support that decision so if you happen to have spoken to officers and HODs about a particular incident you've had in the past is that going to help, does it help enrich your knowledge?</p> <p><b>Callum:</b> Not really because every exercise that they do, its laid down, this is how you er..teach you out of the book and that sort of thing. When they discuss, what if this happens, what if that happens and we jot that down but in reality that's what will be expected and it will be personnel at the incident whatever especially with small ships it will be just the Quartermaster up on the Bridge on the</p>
1 5	32:48.9 - 37:00.8	<p>...one person on the gangway, younger lads...just joined and it will be a very difficult decision. Obviously there is a support network from more senior people but it is, it will be down to their decision at the end of the day and I don't think that is appreciated as much as it should be in a lot of ways and especially if you haven't done it, you're not there and that, I don't think that's appreciated as much as it should be.</p> <p><b>MO:</b> So you don't feel like if you are in the force protection arena, if you are on the edge, you are a QM or an armed sentry that you are particularly supported in that sense, they're just stuck out there on their own...</p> <p><b>Callum:</b> Yeah, yeah.</p> <p><b>Chuck:</b> ...it's who you're working with, like you say if you've got a QM who has been working on board a month , he's duty and you're duty Leading Hand then you are like, you need to keep an eye on him 'cos its his first duty. Like, everybody's been there. You're not going to be so confident on what he's doing, just keep an eye, 'cos he's going to have to build it up. And like if you go back to Firex [Fire Exercise] and you're the person there and you're waiting to go in [into a burning compartment] and behind you is the Duty Senior Rate and you know him personally and you know he's good at what he does; and he's had experience, 15 years, then you are going to be more confident going in there if he's telling you to go in there. Whereas if you've got an artificer who's been in 6 years and he's like 'go in there, go in there' and he's got not no confidence with him and you're like, is he just getting me in there because I am the Attack BA [Breathing Apparatus] or the Initial Attack, do know what I mean? I think you really need to confident in whose giving you that order.</p> <p><b>MO:</b> Right OK, so you feel you really need that...</p> <p><b>Chuck:</b> You need that personal interaction with that person or the knowledge of their, what they've done. I've only just joined the Ship, and I'm only there for a couple of weeks. I mean through the squadron</p>

		<p>you know faces and you know people. You say about talking about people and that I know if I caught up in something like that and I didn't know that person, I would feel a wee bit of unease because I do not know what he's like or she's like. Whereas if you know that person, a friendship or whatever it s like, yep. You'll be alright. I think you'll not worry as much really.</p> <p><b>MO:</b> Has anyone else got anything on that, its an interesting point because increasingly sailors are finding themselves armed or quite often they are on the frontline aren't they? If they are fighting fires or firing small arms or whatever it is. Don't know if anyone else has an opinion on that?</p> <p><b>Mouse:</b> Yeah, it all goes back to the respect thing. Because it could be a fire, in the Galley, they are on 1 deck making this decision. And we're in the Ops Room, listening to pipes and everyone's getting in to suits and getting ready to go in there. And then they'll say, right start your re-entry. But we're the ones holding the hose pipe thinking, shit, what's going to happen? So if the respects not there and your knowledge of them and their job is not there, you're like, 'Are you sure it's OK to go in there, is it alright to be doing this?' So I'd say it's all about respect.</p>
1 6	37:00.8 - 38:43.2	<p><b>MO:</b> Anything else?....Are you generally agreeing?..[Yeah, yeah] Because if you disagree that would be just as interesting..Right OK, what do you think happens if you a Command Team that doesn't interact, they just issue orders?</p> <p><b>Callum:</b> They'll just seem more far away than they are. You wouldn't be confident in their abilities..er..its a two way thing. You should know their abilities and they should know yours, hopefully strengths, you should have a few strengths and weaknesses. You should know their as well as they should know the team's strengths and weaknesses as well and er..that's important and that's through the chain of command .....</p> <p><b>Ryan:</b> I don't think it makes much of a difference really. They're the bosses, you've got a job to do..so...</p> <p><b>MO:</b> Right. OK but what about that situation Mouse was talking about where you're about to go into a flaming compartment and er...do you need more than just an order to go in or...?</p> <p><b>Ryan:</b> Well you should know what to do. You should know what you are doing anyway.</p>
1 7	38:43.2 - 43:15.9	<p><b>ENDING QUESTIONS</b></p> <p><b>MO:</b> OK. Can I just er...I mean we're almost done, I just want to ask a couple of other questions really related to this and that have come up elsewhere. One of them was about leading by example. I mean how do you feel, one thing that has come up in the past is the Store Ship scenario where its all Junior Rates that end up storing ship. Is that an OK situation or is that a massive no-no as far as you guys are concerned?</p> <p><b>Ryan:</b> When you hear the pipe 'clear lower deck of all personnel' then you do expect everyone but what you do find the Junior Rates get</p>

		<p>straight up there and then Senior Rates but Officers if they come up can kind of take their time and even then if it pouring of rain you tend to find the Officers either inside or just inside the door, you never find them right outside but I suppose that's just them taking their authority and trying to use it.</p> <p><b>MO:</b> For good or bad?</p> <p><b>Ryan:</b> Well, for them: good.</p> <p><b>MO:</b> Anybody else?</p> <p><b>Gaz:</b> To be honest if I was in that situation, I would be by the door.[Laughter] If you can get away with it.</p> <p><b>Callum:</b> On a small ship, it tends to be quite good. They mostly turn up. I think they appreciate that's one of the things they have to do. However...erm...I had a ship that was totally different than here, yeah...people on board..they'd come down really hard on the Junior Rates. Yeah Ok, you've got to maintain the required standard But everyone knows their cabins are not up to scratch and just little things like you come to the Senior Rates and they come down or the Officer of the Day {Duty Officer} or..the XO, when they are doing rounds [inspecting accommodation]and they are doing overheads and all of that. Everbody knows that the Senior Rates mess doesn't get done, the overheads will be skanking and I know, I appreciate that er.. yeah, its a perk of the rank: Not having to do rounds but the Chiefs should still do their own spaces and thats one of the perks that they don't have to be supervised.</p> <p><b>MO:</b> OK anybody...thanks very much for that, anybody got anything to add on that? Just on the equality of how people are expected to behave and Store Ship, cleaning, parts of ship and things like that</p> <p><b>Chuck:</b> I think you've got to understand you're in the military, when you see a PO or a Chief, the things you are doing, he's already done that. He's seeing it as you get promoted its a kinda perk so why should an Officer stand out in the rain and an AB stand inside, you know what I mean, that's them using that perk and there is a reason that they are an Officer because they ...well wahtever you know what I mean? To a certain extent they are allowed to use that but some people take the piss and I think thats what annoys a lot of people. You might have an Officer who is sound and you know where you are, you know the line that you cannot cross. Yet, he'll stand in the rain next to you or there will be the occasion where he will sit inside and do nothing 'cos he's busy or... and noone will say anything. But you might have another Officer who just won't do nothing or another scenario another Leading Hand or whatever, just use their authority and you're just like...why?</p> <p><b>Joe:</b> I think the Officer that is going to stand in the rain is going to get more respect with the lads then the one that doesn't bother.</p> <p><b>Chuck:</b> Like you say small ships is pretty good isn't it? Theres not anyone to say 'I'm an Officer, you stand there..' Its just all muck in, get it in and then the quicker you're not standing in the rain for instance or whatever. There's always that one or two, you just think....</p> <p><b>MO:</b> OK. Anything else, agree or disagree?</p>
1 8	43:15.9 - 44:55.7	<b>MO:</b> OK, well that's just about all the questions I've got, I just to ask



any of you if you want to add anything to that. I'm interested in how the Command Team interact with all the levels of the Ship and how the team works and leadership works, so if anybody's got anything they are particularly ...so its an opportunity to have your say.

**Chuck:** Its all the same on small ships, I've been on a few. I work with the Ops {Operations Officer}, crypto and that..Its good to see that the Ops comes back as an XO, there are 7 XOs in the Squadron at the moment that were all my Ops Officers so its always good to see that they progress and they come back like...Ryan was saying the XO that's joining the Ship, he's my old Ops Officer, I know what he's like, I worked with him, he's a good guy but then a lot of these young lads they are just taking my hearsay and they might have a run in with him and like ...'cock!'[laughter]. Quite close, I think the Squadron. The same faces that reappear which makes it a lot better I think 'cos then you can rely on each other and ...

**MO:** OK, Well thanks for your time, I know its awkward for you to sit for an hour and talk about stuff especially leadership issues so I am very grateful for your time

## INTERACT FOCUS GROUP 3 – TRANSCRIPT

DATE 24 May 2011

VENUE On board RN Mine-Countermeasures Vessel (Junior Rates Mess)

### PARTICIPANTS

Name	Gender	Age	Consent
Tony	M	22	√
Hattie	M	24	√
Daryll	M	20	√
Henry	M	30	√
Heimdall	M	22	√
Collom	M	28	√
Billy	M	22	√

	Timespan	Content
1	0:00.0 - 4:39.4	<p><b>TOPIC 1 – THE VALUE OF INTERACTION</b></p> <p><b>HOW IMPORTANT IS INTERACTION?</b></p> <p><b>MO:</b> Right OK. Recording now and the other thing is that I am going to take notes on who is speaking because when I play back the transcript its easier for me if I know who speaking so that if I can relate a comment that you said at the beginning with one you said at the end otherwise it's all a bit..It's not I can associate with you...a person, just so I know who is speaking, otherwise your voices can sound very similar on the recording. OK so you're all happy? OK. My first one, just to get the ball rolling is how important is it for the Command Team to interact with Junior Rates?</p> <p><b>Henry:</b> I think its very important for information to get down to the Junior Rates Mess. When evolutions are happening and we are thinking 'why are we doing this? What's the point? We're not getting the information, why are we doing it?' Not just the reason we are doing it, what's the logic behind it. [That's right] Because you are thinking, why are doing that, it would be easier to do this before we do that. Because the planning doesn't get down to us, we just get told what to do.</p> <p><b>Heimdall:</b> I agree with that.</p> <p><b>Tony:</b> I think so because if something goes wrong it all comes downhill</p>

to us. And the reason we say well actually we don't understand what's going on. Whereas if you actually understand the logic behind it you can maybe...

**MO:** So you think that knowing the logic behind will help you to do your jobs better?

**Billy:** Yeah.

**Henry:** The reason why we are doing what we are doing.

**Billy:** If you are doing something because you are told to, you are like 'what the hell is the point of this?'

**Tony:** Whereas if you know the actual reason behind it...

**Billy:**...the actual reason behind it, you are more focussed on doing it. Instead of being annoyed that you've got to do it.

**MO:** Right OK. If I ask any seemingly stupid or naive questions.

**Tony:** There is no such thing as a stupid question..

**MO:** Obviously I will have an opinion but I am interested in yours not mine. Right OK, so it's important and is everyone agreed on that? Does anybody have a disagreement with that?

**MO:** Also you said its important because you can do your jobs better if you know the reasons behind it.

**Henry:** I wouldn't say better. But your thinking are they doing it for embuggerance factor or are they doing it for genuine reasons it needs to be done. If we don't get weekend leave this weekend, what's the reason we don't get weekend leave this weekend? Is it because we are sat at anchor off Faslane [home port], which we did two weeks ago. We were sat there all weekend, didn't do anything ...just seafox runs up and down here ..that's just sheer embuggerance factor.

**MO:** So in that particular case, you didn't know why you were er....

**Henry:** Oh, we were on an operation

**Hattie:** We got diverted in there because the weather was so rough...

**Henry:** We couldn't cover the areas we were meant to cover..so were re-tasked to cover the area up and down here...but we anchored off here.

**Tony:** At night times we were finished by about 4 O'Clock. And we are thinking 'Well, Faslane is literally just there which is just as quick....'

**Henry:** But that comes out of out hours cover for the dockies {civilian dockyard workers}and obviously, we were tasked for 2 weeks, so we were expecting to be out for 2 weeks but all the people are thinking....we are that close to home. Its just the logic behind ..sat doing nothing and ....

**Billy:** ..being able to go down the pub [laughter].

**Henry:** Some things seem to be done for embuggerance or...because we are the Royal Navy we are going to do it like this. And erm...I don't know but that just my opinion.

## TOPIC 2 – INTERACTION STYLES

### WHAT STYLE OF INTERACTION IS APPROPRIATE AND WHEN?

		<p><b>MO:</b> That's great, thanks. So, what kind of interactions do you look for, what sort of interactions do think are the best kind, so if you are talking to the Captain for instance , is it best to be formal, what's best?</p> <p><b>Henry:</b> It always starts formal and then it gets more relaxed and more relaxed as it goes on. That's how it should be. That's the discipline in the forces, it should be formal until told otherwise. Smaller ships have got a better demeanor a better</p> <p><b>Tony:</b> Rapport</p> <p><b>Henry:</b> Yeah.....than big ships. We are more friendly, more not as old school....</p> <p><b>Tony:</b> You are able to talk to people who are more senior...even if you are ...Down</p>
2	4:39.3 - 5:56.4	<p><b>Daryll:</b> Down south in the Bases and that, they are very very formal. Up here, as long as you can know the boundaries..obviously, its much easier to talk to people.</p> <p><b>Henry:</b> It depends on the person as well. Obviously if its an Officer but you know the person yourself, if they like formal they'll tell you to be formal. Whereas in my department, they are very approachable, very relaxed, very chilled out...</p> <p><b>MO:</b> And you prefer that? You said small ships are more informal, is that better, does that suit you?</p> <p><b>All:</b> Yeah yeah, yeah.</p> <p><b>Daryll:</b> The thing is that it is formal when it needs to be. So..er....its more mutual respect I find and I think that's more right that the Officer respects you and lets you do what you do because he expects you and actually stands aside, because he expects you to do it ..you can do your job better.</p> <p><b>MO:</b> Right OK. So to come back to yourself, how do you feel about that?</p> <p><b>Collom:</b> I was just waiting for you to pick me up. [Laughter]....I am the Captain's steward.....what's the question again? [laughter]</p> <p><b>MO:</b> Formal or informal?</p> <p><b>Collom:</b> Obviously there needs to be formality but I mean the more you speak to them....</p>
3	5:56.4 - 8:57.4	<p><b>Collom:</b>....but I'm always half formal with the Captain because I work with him. I call him 'Sir' and 'Boss' and sometimes I just speak to him and not address him as anything...but yeah..I think it works...I've never been on a big ship, I don't know what big ships are like but I wouldn't like it [laughter].</p> <p><b>All:</b> [yeah, yeah]</p> <p><b>MO:</b> OK, thanks for that. Er..do you think that a lot of interaction with the Command Team, or even HODs, Senior Rates, Killicks [Leading Hands] even, do you think that improves Ship's performance or do you think it doesn't do anything?</p> <p><b>Hattie:</b> Yeah, it does.</p> <p><b>Billy:</b> Everyone knows what's going on that the thing.</p> <p><b>Henry:</b> I've got to try and get the lads out of bed in the morning, which</p>

is a hard enough task as it is. If I don't know why I'm getting out of bed and I've got to try and motivate these lads to get out of bed to shit, shower, shave and make their beds, to leave the rec space tidy for a change, get into their overalls or clean working rig, man their post ....if I'm not getting told as Leading Hand of the Mess or a any Leading Hand on board why, I think we are loosing straight away. The Command tell us what to do but they are not the ones who have to motivate the lads so...

**Billy:** If he's coming in waking us up ...we'll get annoyed with him that he's coming in and doing .....

**Tony:** Why?

**Billy:** Yeah.

**Henry:** So there is a Command structure but there is the Command structure and we're the motivators: the POs {Petty Officers}and Killicks are.

**MO:** So do you see it as they provide the information and you provide the motivation?

**Henry:** Yeah.

**MO:** Does anybody disagree.

**Tony:** The thing is that you do job a lot quicker and a lot faster if you know what the reasons are. So if you get told if you do that, this weekend you might get on leave sooner or something like that, then you'll know that's motivation for us to go out there do our job quicker, faster and better.

**Henry:** We all know what the job but we want to know what the carrot is. We get out of bed, we get this done, we'll be secure by 12 O'Clock. They'll be out of their bed in a flash.

**MO:** So are you practicing what you preach in the sense that its important to tell people why and you do that? Do you think it's important that up the chain, they do that, or do you just leave that as your role?

**Henry:** Well, that is my role on board as a Leader [Leading Hand]. It's my job to motivate my lads, motivate my team. Officers and Senior Rates, they have different job and they'll step in, that's how it is, that's how it works. But the more information that comes down the line, not just to me but also the lads. Its not my job to be polite, its my job to tell them, get out of bed now, and we'll all get weekenders [weekend leave] as soon as we can.

4 8:57.4 -  
10:14.0

## **TOPIC 3 – CO'S AIMS AND OBJECTIVES**

### **HOW DO YOU KNOW WHAT THE CO'S AIMS AND OBJECTIVES ARE?**

**MO:** Right, so that was my first question, so thanks for that, that was really good. How do you guys personally find out what the Command Aim is?

**Hattie:** What, when we sail for our tasking?

**MO:** Yeah, well any...go ahead:

		<p><b>Tony:</b> Daily Orders.</p> <p><b>MO:</b> Right, OK.</p> <p><b>Henry:</b> Gets piped [broadcast] as well.</p> <p><b>Heimdal:</b> I don't think it gets piped that much.</p> <p><b>Billy:</b> It doesn't get piped that much.</p> <p><b>Tony:</b> I know it all the time because I'm on the Bridge.</p> <p><b>Hattie:</b> Yeah, like every week there is a planning meeting.</p> <p><b>Heimdal:</b> And the Captain, like...give him his due...as soon as he knows anything he tells us sort of thing. I mean we know generally what sort of things but they change from time to time. So we get confused. You do get told information but it changes.</p> <p><b>Henry:</b> The Command Aim is in Daily Orders, we just don't get told what happens in Command meetings...</p> <p><b>Hattie:</b> Command Briefs.</p> <p><b>Henry:</b> Right. Command Briefs.</p> <p><b>Heimdal:</b> I mean obviously a lot of people attend it but I don't know..I don't know if any of you guys go?</p>
5	10:06.3 - 13:02.2	<p><b>Heimdal:</b> I don't know, I don't know about you guys but...</p> <p><b>Henry:</b> What about that 'visit' meeting, have we had that yet?</p> <p><b>Heimdal:</b> Yep, yeah.</p> <p><b>Henry:</b> So we don't know what's happening with that yet. So that's only about 2 weeks away We don't know what's happening for ceremonial duties, duty parties, if we are marching through the city, 'ships open to visitors',...</p> <p><b>Tony:</b> Its very last minute on here.</p> <p><b>Henry:</b> You can't dictate on here there's no...What's the word...the aim and actually what the requirements are...so people don't want to take leave or bring your family onboard...</p> <p><b>Tony:</b> We've never been able to plan our life more than a week in advance. Or in some cases for more than a day in advance and thats for more than a year and a half.</p> <p><b>MO:</b> Are you therefore...</p> <p><b>Billy:</b> We are in the dark a lot of the time.</p> <p><b>MO:</b> Yeah. Is that because you are not involved in the planning. So for one thing it obviously gets onto Daily Orders, but fine...that's just a day's notice, stuff in the shortcast is just a line, doesn't tell you much. So you feel you would benefit from being more involved in the planning process...</p> <p><b>Billy:</b> just knowing 2 weeks in advance would be nice...well yeah...because at least you could go home....we simply don't get told.</p> <p><b>Tony:</b> Yeah, we cannot plan a thing on here.</p> <p><b>Henry:</b> I think its more manning and the changing the Ship's programme at short notice.</p> <p><b>MO:</b> OK.</p> <p><b>Tony:</b> you wouldn't mind like the changes in the Ship's programme...is not a thing that bothers me. Its just that we never get told, ever..</p> <p><b>MO:</b>OK.</p> <p><b>Henry:</b> Well it does change last minute.</p> <p><b>MO:</b> Again, its slightly naive question but how does it affect you?</p>

		<p><b>Henry:</b> Straight away it affects you. If you've got something planned in ....if you hear the lads are dripping {complaining} and if the doors shut, obviously they can drip as much as they like .....but that's going out on 2 deck. Obviously yeah...the heads do drop.</p> <p><b>Hattie:</b> Its individuals as well, it affects them, those with wives and kids and that...which is a big...</p> <p><b>Henry:</b> I'm getting grief at home. She's like 'why?' Just walk away. Its a job isn't it? Its a job not my life..it's just a job. It's not a marriage, its a job, yeah there's a uniform and all that involves ....but the family don't understand do they?</p> <p><b>Billy:</b> They didn't sign up. There is an element you expect to your job but you don't expect your family to pay for it.</p>
6	13:00.4 - 14:03.9	<p><b>Billy:</b> You tell them you're home in a few weeks and they start making plans, a nice meal whatever because you haven't been home in a while...</p> <p><b>Henry:</b> You know yourself, many, many, many a time ....you're probably thinking, come on guys, I've been here a hundred times...</p> <p><b>MO:</b> No, no. I'm not drawing any...no I definitely sympathise with all of that having as you say, been there but it's not...well, I've got to be careful what I say but for me it's not a case of; 'oh, well ...tough.' Life in blue suit, all that sort of stuff. What I am interested in is how it affects you because my research is in leadership so I want to be able to add something to leadership in the future ...so, I don't think we'll do that by saying, 'tough, lads, life in a blue suit.' I've probably said too much already.</p> <p><b>Henry:</b> But its enough for me to put my notice in. I'm outside in 3..or 4 months?</p> <p><b>Billy:</b> Wooh!</p>
7	14:03.8 - 15:26.2	<p><b>Henry:</b> Because you can't plan your life. Erm...deployments are getting longer and more frequent, planning in Base Port is getting less and less and less. And weekenders are getting.....</p> <p><b>Tony:</b> Its had a big effect on me er....I've put in for a Branch Transfer and I'm going through that process as well.</p> <p><b>MO:</b> And you're going to....what branch are you going to?</p> <p><b>Tony:</b> Er....I'm going to go into the MA [Medical Assistant] branch.</p> <p><b>MO:</b> Right. Anyone else?</p> <p><b>Hattie:</b> I'm just doing the job on here, I'm getting a bit sick of it now. Its just...not what it was...</p> <p><b>MO:</b> And you think some of that ...because some of the things you have mentioned like not getting home at the weekend are obviously out of the control of the Command Team. But is their stuff they can do to improve that? You've already mentioned the information...</p> <p><b>Billy:</b> Well take last Friday..we were....obviously leave is generally told before we get alongside but on Daily Orders they'd scheduled 2 briefs between half eleven 'till twelve which could have been done...</p> <p><b>Henry:</b> There's plenty of time in the working day ..</p> <p><b>Daryl:</b> They'd planned the brief and we were like 'we're ready now' and they were like 'no you're not doing it 'till twenty to twelve.'</p>
8	15:12.8 -	<p><b>Hattie:</b> I just don't think Junior Rates are appreciated as much. ....two</p>

20:14.9

perspectives: one on small ships and one on big ships. The workload that an individual gets obviously is set to him. But due to the salary and that I don't think is actually..you know..enough for what they do. On a big ship you get maybe 8 or 10 hours and it works out...you know..according to the rank structures. You get jobs and you do them but on small ships you have your own job and you have other jobs as well. So they expect me to do more than one thing, try to orchestrate things so that it flows ....sometimes its impossible but sometimes you've got a lot of jobs on and you've got to do them all in one day, its impossible sometimes.

**MO:** Yeah.

**Tony:** I mean like sometimes say..because of the weather yesterday, we've got to work double hard today to get everyone through and yeah that's understandable. OK, the weather was bad so how are these guys going to get their training? But we've got to work harder and we're not going to get off any earlier on Friday.

**MO:** No

**Collom:** I think...going back to the leave last Friday, its just another kick in the teeth to the lads. We could have got away 2 hours earlier, the lads could have got home early. Down South...I mean it's a big difference ...and erm...from the Officer of the Day's [Duty Officer] point of view he's like 'well I'm here all weekend so stuff it!'

**Henry:** That's that that....

**MO:** Really?

**Collom:** Like a lot of these Officers live down south

**Heimdal:** Its its like....yeah..so ....weekends....

**Collom:** If he had just said: 'Right lads, secure from 9 O'Clock, 10 O'Clock, thin out. Have a good weekend...everyone would come back on a Monday, hell of a lot better mood having had a good weekend....secured early and then instead, no they're letting us go at 12 so I'm not getting home until 8 or 9 O'Clock at night and then you're coming back Sunday morning to get back to start the grind again. Basically..

**MO:** So a long week and a short weekend?

**Collom:** Yeah.

**MO:** OK.

**Henry:** Just on the weekend thing, I know we keep harping on about the weekends...

**MO:** No, no go ahead, it's good.

**Henry:** Its the manpower requirements, we're 1 in 4 [1 day on 24 hour duty every 4 in addition to working normal days],big ships are 1 in 9 weekends. Small ships, 1 in 4. I'm 1 in 2 at the minute becasue we've got people away on courses.

**Heimdal:** Same.

**Daryll:** We're 1 in 2.

**Henry:** So its very restrictive er...So weekends are less and less and less.

**Billy:** The weekends that we get given should be as long as possible.

**Henry:** It's a Fleet directive that no Ship in Base Port should be less



		<p>than 1 in 4. Its not the Command on here its management shore-side. I know alarm bells are going off there because of redundancies...They are short on manpower anyway...which is another reason I am getting out. Because of what's going on [Strategic Defence and Security Review (SDSR)]. So its not the plans as such...aboard ship. I think they can't control....the ship has to be manned.</p> <p><b>MO:</b> Right.</p> <p><b>Billy:</b> We're lucky if we're 1 in 3.Very lucky.</p> <p><b>MO:</b> Is there anyone else who's either got their notice in or thinking about it for these reasons?</p> <p><b>Hattie:</b> Give it a few years, once I've got family, I'm leaving, I'm out.</p> <p><b>Heimdall:</b> Yeah, yeah I'm the same.</p> <p><b>Henry:</b> I think it just about describes the whole Navy.</p> <p><b>Tony:</b> When I'm looking at it, if I could get a better job shoreside, I'll go for it straight away. Obviously, I need to look around first. But if there's something better out there, I'd definitely go for it, this job's just not working.</p> <p><b>MO:</b> OK. Fair enough.</p> <p><b>Henry:</b> What is the percentage rate of people with their notice in?</p> <p><b>MO:</b> I don't know. I just don't know.</p> <p><b>Henry:</b> I know it fell from 5 to 2% due to the redundancies getting announced.</p> <p><b>MO:</b> I don't know. I just don't know. It's not something I've looked into that much. I know that the Continuous Attitude Survey said that 45% of Junior Rates felt undervalued.</p> <p><b>All:</b> Yeah, yeah.</p> <p><b>Hattie:</b> There's just no appreciation.</p> <p><b>MO:</b> But I do not know about PVR [Premature Voluntary Release] rates and things like that.</p>
9	20:14.9 - 22:42.7	<p><b>MO:</b> Secondary question to that is: Should Ship's Company members be pro-active in finding out what the Command Aim is? So, OK. Its on Daily Orders it gets piped but if you don't know what it is or you feel it may have changed it is down to you to go and find out or is it down to the Command team to tell you?</p> <p><b>Daryll:</b> When I've been QM [Quarter Master] on the Gangway and that. I've come up and I've asked about Daily Orders and that off the Officer of the Day, some of them though don't know and that...</p> <p><b>MO:</b> Right OK.</p> <p><b>Daryll:</b> You can try and find out but...</p> <p><b>Henry:</b> It depends what the situation is, you can try and find out. If we're OST or BOST [Sea Training], or whatever they call it these days...you need to find out because the Fosties [Sea Training Staff] go ' You, what's the Command Aim?' and you're supposed to know it. But if you're in the Caribbean on a six month tour, you wouldn't give a shit what the Command Aim is, I'll just be here off the back end [sun bathing].</p> <p><b>MO:</b> That's an interesting point because do you think that the Command Aim actually helps you to do your duties?</p> <p><b>Henry:</b> The Command Aim is just a word really.</p>

**Hattie:** It's just a phrase really, 'init? Totally agree.

**Henry:** Yeah. I mean each individual really..onboard ship in this Ship's Company is capable of doing their job without that.

**Hattie:** Its a really good Ship's Company. There's no-one here who can't do their job.

**Henry:** If you lost the Command Aim, I don't think it would....you'd do your job every day. Yeah, you'd do as you were told. Shore-side say you're off on an operation for 2 weeks, you're on an operation for 2 weeks. I'm looking at Daily Orders today, the aim is to conduct a successful operation. [laughter]. That's just common sense. At the end of it. If you got rid of it, I don't think it would.

**Heimdal:** I think anybody would know the Command Aim right now so....

**Henry:** Yeah. [reading from notice board]...Successful MCMG Week. [laughter]. Yeah, yeah. I could have guessed that...

**Billy:** It's not going to say: 'to have a crap MCMG Week' [Laughter]

**Henry:** Or: 'Make it to Friday; Go Weekenders' [Laughter]

**MO:** I suppose if that was it, you've got good chance of succeeding unless the world ends or something...

**Heimdal:** Weekend: on the Ship.

1 22:42.7 -  
0 24:41.6

## TOPIC 4 – GETTING TO KNOW LEADERS

### HOW DO YOU GET TO KNOW AN OFFICER WHEN HE/SHE JOINS?

**MO:** So this is a different question. Quite often, if you have a new CO [Commanding Officer] joining or a new XO {Executive Officer} joining erm..you'll know quite a lot about that guy. Can you just tell me a little bit about what happens before, let's say, a new XO joins?

**Collom:** We scrub out [clean].

**MO:** Yeah, OK.

**Hattie:** You know about them before their arrival. You get like a profile of them, a photo and some of their history...what sort of person they are, what their rate...

**MO:** And would you be quite interested in what kind of person, what their personality is...

**Hattie:** Yeah, but quite often you'll know what kind of person they are by assessing it yourself and coming to your own conclusions regardless of what's on paper.

**Henry:** Its always the same with new joiners, a firm start then relax as you get to know him. They always want to stamp their authority on the ship, or section whatever, and you get the 'this is me, this is what I am all about.' and then you go from there, you expect a firm start and then softer as it goes.

**MO:** So what will happen if somebody joined that you know...and they broke that mould and they were actually quite relaxed from the start. How would the Junior Rates feel about that?

		<p><b>Billy:</b> We'd still be like...we'd we'd we'd still be expecting to be like what he said, like. We'd expect that, we wouldn't treat him any different.</p> <p><b>Hattie:</b> well that's slack but we wouldn't be slack with any job or task at the end of the day, we'd still be professional.</p> <p><b>MO:</b> Do you think ...</p> <p><b>Tony:</b> We'd still do our job...regardless of any higher authority.</p> <p><b>MO:</b> You've just said, you know 'slack', so does that imply that if someone arrives and they are very relaxed that ma</p>
1	24:41.5 -	....maybe you wouldn't have as much respect for them?
1	32:44.1	<p><b>Hattie:</b> No not all, no. That's just their approach isn't it? It just doesn't mean that we would do our job any differently.</p> <p><b>Henry:</b> It's just if he is approachable and he's easy to talk to and if he is on 2 deck or 1 deck and he's: 'oh, how's your weekend and blah blah blah.' Or you've lost the football this weekend, if he's a football fan. I mean our Captain's a mad rugby fan, but I'm a football fan. But you know his personality and you know he is a rugby fan. Collom [Captain's Steward] obviously tells us pieces down the mess.[Laughter]</p> <p><b>MO:</b> You keep everyone informed do you?</p> <p><b>Collom:</b> I'm saying nothing. [Laughter] Sometimes. [Laughter]</p> <p><b>Henry:</b> But obviously you can gauge how formal or unformal you have to be.</p> <p><b>MO:</b> OK and is that important to the guys...er in the Junior Rates Mess to be able to work out where they stand with somebody and do you do that by talking to each other or...</p> <p><b>Hattie:</b> I think you can do that yourself. We're all big boys, we can gauge people's personalities. I mean we all have personality clashes regardless on ships.</p> <p><b>Henry:</b> You learn to avoid that person. If someone annoys you, you keep out of the way.</p> <p><b>MO:</b> OK, can I just pick up on that? If somebody, a HOD [Head of Department], Senior Rate, could even be a Killick who is just a bit over dominant or overpowering, how do you actually deal with that person?</p> <p><b>Hattie:</b> You go through the channels that you are supposed to.</p> <p><b>MO:</b> OK, anybody else?</p> <p><b>Heimdall:</b> Years ago when I first joined up, I put a complaint in: Bullying, against my Killick. And he got taken off the submarine and found himself on deployment, which he weren't too impressed about [laughter]. But...life in a blue one 'init? [life in a blue suit] But er...I spoke to my DO [Divisional Officer]and he to the XO and er...</p> <p><b>MO:</b> It worked?</p> <p><b>Heimdall:</b> Basically.</p> <p><b>Tony:</b> Equality and Diversity.</p> <p><b>Henry:</b> But people above that personality whose being more abusive or more loud, they should be picking it up, its not our job. Yes we can talk to our DO, but it should be their job too, you know 'you need to calm down, all I can hear is you shouting on 2 deck, knock it on the head, tone it down.' So it's the Command Structure above that should</p>

be picking up on...Like 'he's got a bit of a stropo personality, he's not mixing in well'....erm do you know what I mean?

**MO:** Yes.

**Henry:** 'He's not getting invited on runs ashore [social events]' or 'the one person getting left behind..slowly getting pushed out of the Mess [social group]' Got no mates, a bit like Tony now..[laughter].

**Tony:** Oh, oh is that what it's like? [laughter]

**Henry:** But we haven't got any problems in our mess, nobody stands out apart from the fish-killer [laughter]. There's no-one we don't invite on piss-ups or runs ashore so....

**MO:** But that might be one way...so if there was somebody who was acting in that way so you would not necessarily invite them on a run ashore or...

**Henry:** No, you would but it's would you stand at the bar and chat to him or would I not stand at the bar and chat to him. You could stone-wall them like, if you didn't get on with them but no...

**MO:** Do you feel that you could, if that didn't work, you know if the guy wasn't getting the hint that you could go to the Divisional System?

**Henry:** You've got to be careful, you're going down a road where somebody is bullying erm...the question was if somebody above us was being a bit too aggressive or you didn't like them, I just wouldn't go on a run ashore with them or socialise with them. Possibly I would avoid them on the Ship, avoid confrontation and avoid them.

**Billy:** You've got to be very respectful to them.

**Henry:** Yeah, then they've got no reason to...

**Billy:** Then you can't get picked up by them.

**Henry:** You can't say 'Oi Chief, shut the fuck up!'.

**Hattie:** I mean, myself, I probably have an issue with a individual or two individuals on board here But I just keep myself to myself. Quite a lot of the Ship's Company, Junior Rates probably feel the same way about those individuals as well, the way they conduct themselves as Senior Rates.

**Heimdall:** You giving a bit away there, Hattie. [laughter].

**Hattie:** Don't worry about it.

**MO:** None of this goes ...none of this will be ascribed to...in won't even be ascribed to the Ship. So don't worry.

**Henry:** Some people have the skills and some people just don't have the leadership skills.

**Tony:** It's the way they conduct themselves, the way they look at you, their body mannerisms, their posture.

**Henry:** They haven't got people skills, some people just don't have people skills. They can't communicate properly.

**Tony:** You can probably see them being the same way as being an AB [Able Seaman] as being a Sub-Lieutenant, it's just the way they've always been.

**Heimdall:** You know what .....I think its er...it's almost like er...they can't be themselves ...they are trapped in earlier past and they can't conduct themselves.

## TOPIC 5 – HOW DOES INTERACTION AFFECT PERFORMANCE?

### DO OVERBEARING LEADERS GET MORE OR LESS OUT OF FOLLOWERS?

**MO:** OK Apart from being unpleasant to work with do you think they would still get the same performance out of the Ship's Company? Or do you think they get less..more?

**Henry:** Probably not as much enthusiasm. Not the same urgency, you still get the same result. The job would get done but the urgency behind it.

**Hattie:** I think about the way people conduct themselves you know if something goes wrong you know..like swearing and all that is not going to resolve the situation. If something happens that's not like according to plan, got to go back to the situation to see if there is anything that can resolve it to get back on track. Whereas losing your rag, that's not going to help. Obviously, that feeling from that individual could roll downhill, swearing etc. But we'll still perform to the highest standard that we can do on board.

**Henry:** And then sometimes you do need that approach, where we need someone to shout and scream and swear and get the job done especially by jumping up and down.

**Hattie:** I was just saying when it's appropriate and when it's not.

**Henry:** Some of the old school ways are lacking a bit on ships where positive leadership as in taking charge whereas you can always tell with old three badge [long serving (at least 12 years)] old killicks, ....that's just the old school ways, there is a time and a place for that. But we're touchy touchy feely feely now aren't we? It's not like 20 years ago.

**Hattie:** I think the Navy's full of big girls to be honest with you. You know in the Army ..you've got an issue, get taken 'round the back, sort it out. it's not allowed anymore.

**Henry:** Minor Admin Action , MAA, when did that come in? Just a paperwork exercise. You give someone a bollocking. If Tony fucked up, he would be scrubbing the shitters for a week. Whereas now, you're filling in paperwork. Someone has given me a rank and a rate to use, I can't. 'Come to the Ship's Office, mate. We'll fill in the form. By the way you're cleaning the toilet tonight.' Touchy Feely, sign that. I mean where's the bollocking where's....some might say well he just slept in or gobbled off [spoke out of turn]. [laughter] I'm always thinking of Tony [laughter].

**MO:** You're not painting the best picture [laughter].

**Henry:** No you're given a rank, need to use it.

**MO:** OK. Can I just go back to what you said about shouting and squealing and all that sort of thing. Do you feel generally,

1 32:44.1 - **MO:**...but generally do you think leadership should be calm?

2	35:27.1	<p><b>Henry:</b> I think it should be calm.</p> <p><b>Tony:</b> If you are calm, if the leader is calm then you feel he is more in control.</p> <p><b>Hattie:</b> I'm not saying you can't be loud but it's the way you are loud. It's what you are saying...</p> <p><b>Heimdall:</b> Is it abuse?</p> <p><b>Tony:</b> But it can be too rushed.</p> <p><b>Henry:</b> Nope, lost control lost control.</p> <p><b>Heimdall:</b> Its more, to be authoritative: be calm and collected you can get the message across.</p> <p><b>Billy:</b> It's like when they say pick a moment ...there's a difference between keeping calm and throwing your toys out the pram. You see when people lose their head and start screaming..you're like...'tossler!'</p> <p><b>Hattie:</b> And that's nothing if we're picking up on leadership. So when you're IC [In Charge] and you've got a killick or a Senior Rate, depending on your location, you could be alongside, or whatever his job is but then you'll get Senior Rates, they'll put them in when there is no reason to do that. So then you're I'm not going to go against like a Senior Rate but sometimes they're put in when they don't need to. An you're like, 'I'm sorting this out, I'm IC, I just want to get the job done'.</p> <p><b>Tony:</b> And in some cases, I've seen it before where like a Senior Rate has had to stand in and he's like telling us what to do and then he's getting a bollocking from the bridge and then it just goes....all because he already knows what's to be done and then he gets a bollocking from the Bridge and things just start going ....</p> <p><b>Collom:</b> And also you shouldn't be telling people off or re-briefing people in front of minors [Junior Rates], so if Henry is re-briefing me and somebody's there as a <i>young</i> AB. He shouldn't be seeing me ...Henry should pull me aside and say 'look mate there's younger lads with you, you need to show them..' instead of them thinking oh, I'm useless or whatever.</p> <p><b>MO:</b> OK. Thanks a lot. Ok. So...</p>
1 3	35:21.9 - 37:12.6	<p><b>TOPIC 5 – HOW DOES INTERACTION AFFECT PERFORMANCE?</b></p> <p><b>HEARTS AND MINDS</b></p> <p><b>MO:</b> OK, we are the last group of questions. You've been really forthcoming, so thanks for that. The last one then is how can the Command use interaction to win hearts and minds?</p> <p><b>Henry:</b> Use more carrots. More incentives. I mean you shouldn't need carrots to do your job but...</p> <p><b>Heimdall,</b> It's always good to offer an incentive 'init?</p> <p><b>Henry:</b> The carrot you should have for people is a goal at the end of it, not just 'yeah we cracked MCMG this week fellas, well done.' That means absolutely nothing to me whatsoever. It could be crap, bad, poor, brilliant fantastic, doesn't matter. I'm going home Friday and I'm going to delete that from my mind. I think there needs to be more, is</p>

		<p>that the right word, incentive?</p> <p><b>Billy:</b> It makes you want to achieve more.</p> <p><b>Henry:</b> Last year's OST {sea training}. We no leave from the second week to the day we finished....so what's my incentive to dig out like a massive.....a year later I'm no better off for it...</p> <p><b>Billy:</b> Just doing it again.</p> <p><b>Henry:</b> I'm just doing it again. OK I'm going outside but there's no...well I don't know...there should be an incentive..more...</p> <p><b>Tony:</b> Half the time on this ship you are doing something for the sake of doing it.</p> <p><b>Collom:</b> Especially on small ships, you're doing OST, operations, Joint Warrior [NATO exercise] and then its round again. So even when you are in your Home Port your still doing operations and Joint Warriors ..still, its the same old rubbish week in week out.</p> <p><b>Henry:</b> So it doesn't matter how you do on OST, could be a good OST or a bad OST, you still deploy..</p> <p><b>Collom:</b> Yeah, very monotonous...and it's the</p>
1 4	37:04.0 - 47:47.0	<p><b>Collom:</b> Its very monotonous, I mean it's going round and round in circles.</p> <p><b>Henry:</b> Yeah.</p> <p><b>Collom:</b> The only way you get off it is either get promoted or branch changing or leaving.</p> <p><b>Henry:</b> Yeah, Yeah.</p> <p><b>Heimdall:</b> Its what you saying before I mean about being a killick on small ships...</p> <p><b>Henry:</b> Yeah. I've always been on '42s [Destroyers] before...er....I've had 4 '42s..er...and I put in for a '42 and I got drafted to my negative Base Port [the least preferred Base Port]. Port to avoid: Faslane, MCM 1 [First Mine Counter Measures Squadron] and I asked all the small ship stokers [marine engineering mechanics], 'have you been all a small ship?'. 'Yeah don't complain. You get home every weekend, never be weekend duty and it's so relaxed, so chilled out...it's all mate mate, never say sir, better atmosphere, more chilled out, mixed messes, not tribal messing where stokers stick with the stokers, you get to eat with the divers...' And it is more relaxed on small ships but see the perks....I was 1 in 9 on [HMS] Liverpool and 1 in 2, 1 in 3 here as a Duty Leading Hand. I'm doing more work I'm outside my preferred Base Port...</p> <p><b>Billy:</b> Never go dormant weekend [no duty personnel over a weekend].</p> <p><b>Henry:</b> I don't go dormant weekend.</p> <p><b>Heimdall:</b> The reason we don't go dormant weekend is because a lot of quite high Senior Rates live quite far away and...</p> <p><b>Billy:</b> They're living on board..</p> <p><b>Heimdall:</b>...they can't travel so they're living on the Ship so they are keeping an extra 9 people on board for a weekend.</p> <p><b>Billy:</b> We're losing our weekend, we're stuck here because they can't get home.</p>

**MO:** Right OK.

**Tony:** Get a cabin [service accommodation ashore].

**Henry:** A lot of the time we're doing the MCMG, other operations everything else is getting done during the week, and doing maintenance at the weekend because we can't get alongside for the week to carry out essential maintenance. So from an ME [Marine Engineering] and a WE [Weapon Engineering] perspective. The sonar's getting lifted at the weekend, any other WE work, especially WE work gets done at the weekends. The other weekend, we were fixing the Captain's chair! Couldn't go dormant leave because we were fixing the Captain's chair on the bridge.

**Billy:** It just seems...it's...

**Tony:** Absolutely crazy!

**Daryll:** Yeah...it seems...'oh what can we pick to fix on a weekend so the Ship is manned and we don't have to get a cabin.

**MO:** Right.

**Billy:** That's straightaway, that's morale...down.

**Tony:** And when we get back...little things like that make us just not want to attempt to do our job. Do a really bad job or er...slow down because we're all: 'why are we doing these jobs? Its...all...shit...I can't find the words [clearly angry]...but...

**MO:** Hmmm. Right so basically, you're being kept on at the weekend so people can use it [the Ship] for accommodation?

**All:** Yeah, yeah.

**Daryll:** I've done a dormant weekend where there's just been a Duty Watch before. Literally, almost no-one else onboard. And we didn't even have any jobs. There was nothing going on over the weekend, we were just..here.

**Collom:** I mean the last time I was duty weekend, the reason I was here was because one of the Senior Rates had to do securing for sea rounds [inspection prior to sailing].

**MO:** Right.

**Collom:**.....on the Sunday night. But he was away fishing over the weekend. And they wanted to do securing for sea rounds on the Sunday.

**Daryll:** Yeah he went away on the Friday, Saturday..we were there all weekend..

**Collom:** 9 members of the Duty Watch on board all weekend for him to come back at 17, 1900 Sunday night, to have a once-round so everything's secure...

**Daryll:** 'Cos they would have to come back then because they live so far away.

**Collom:** It seems that it's a complete waste of time and that ..you can see why everyone's got their notice in. The lads are getting so annoyed and like I said, I haven't been on a big ship but surely ...I can't see myself being any worse off than I am.

**Henry:** You don't mind on a big ship, big ships never go dead...ever. But the programmes set in stone, the ships can't go in and out like these things can unnoticed. There has to be movements there has to



be ...and you've got to pay so much for the berths. But it's always set in stone, the programme. You know...I say to the missus 'right, I've just done a weekend duty, I'll be duty again in another 9 weekend's time, we'll count that and put that in.' The programme's firm but up here. You can plan life better on big ships, you know you're going weekend 1 in 9. I was devastated when we went 1 in 6 When .....we went 1 in 6, I was like: 'what?'

**Daryll:** We're 1 in 2, yeah.

**Collom:** We're 1 in 2 and the lads are asking on Monday or Tuesday, when are we going dormant weekend? Oh, we don't know. Can I make plans now?

**Tony:** That's the long and short of it: can we make plans? You can call home and say: 'yeah I'm definitely coming home this weekend' or 'I'm going to sea'. Or lets go somewhere, let's do something. Or..you find out last thing and they...

**Hattie:** Obviously, like when I was on big ships, see if you did a weekend duty, you were guaranteed a whole day off. Whereas here, it's not guaranteed. I was asking, we had done a weekend duty, the duty watch. And we were not going to sea, we were just going to crack on with work. And of course we were alongside yesterday, we should have got thinned out as soon as....It shouldn't be oh,, we have to ask to have it, it should be entitled to it. You know working without a break, that shouldn't happen, you know health and safety is implemented so that you're guaranteed a break at such and such times. And sometimes even on board ships ...you're never guaranteed your break. You're working for hours and hours. You just need a break.

**Daryll:** Last night I had the middle [Midnight to 4 am], I was made to stay up to do colours at 9 O'Clock [pm] but there was no need whatsoever but that was a decision made and there....there was no need for me to stay up. Now, I'm up, I didn't even get 4 hours sleep. And then I'll have the same again because we'll get back late tonight. And it was half past six, call the hands [alarm call]...I'm going to be knackered for the day and I probably will be for the whole week because I can't catch up because we're going to be non-stop. And then Defence Watches later on. And I haven't had no breakfast either

**Collom:** It's the same for the duty chefs and that. If I'm doing a duty weekend I'm woken up at 4, half past 3 in the morning and then you go to sea on the Monday, so you've been up since half past three every day of the weekend, the Saturday, the Sunday and then the Monday, then you go to sea and then you've got to do lunch, our lunches are obviously later on but say from quarter past one. But by the time I finish lunch say quarter to one, one o'clock. Then I start again and I'm working until 8 so that's a good 16 hour day. And then it's like 'can I go to bed for a couple of hours in the afternoon?' 'No we've got this on, we've got that on.' First aid training or I don't know.

**MO:** Yeah, yeah.

**Henry:** We're deviating anyway from leadership, turning into a massive drip [complaint] session.

**MO:** No, no It's all leadership really. I mean what I am interested in. I mean some of that stuff the Command Team can't do anything about

but what you are saying to me is more information, better planning, that kind of thing would help, so that's an area I can look at.

**Henry:** The boys are tired on the Ship, if that makes any sense.

**MO:** Yeah, you look quite tired.

**Daryll:** If you asked each Junior Rate in the Ship's Company they would want to get off or swap their Ship.

**Henry:** 'Cos the lads on board, we all get on quite well don't we?

**All:** Yeah, yeah yeah.

**Henry:** And I don't think it's the Command's fault. They get told what to do. And so we get told what to do. And I think there is a lot programmed into this Ship. The evolutions within the programme but it has to be done, like. A Firex has to be done every 6 months. So it goes into OASIS, is it now?

**MO:** Yeah.

**Henry:** I think its called OASIS, where every evolution goes in..

**MO:** Oh, I know what you mean, PRISM.

**Henry:** Yeah. You have to be in date for some exercises, stern RASs [Replenishment at Sea] or RAS, so you have to stay in date for those as well as the other evolutions, we've got MCMG week, this week.

**Daryll:** But you don't mind doing those things because it keeps the day going quite fast but it's the thought about where it is in the day that I think is the problem.

**Henry:** There is no consideration for the night watch-keepers..

**Daryll:** Yeah. That's what the problem is. There isn't a problem with doing these things it's like the decisions that are made to do them at the time they do.

**Henry:** I joined the ship in like OST last year. And the lads were all asleep in the Mess, they were completely shattered and they were all the night watch-keepers. And a lot of the Command they do day work, they don't keep watches, they turn up in the morning bright and breezy and they're like school boys. And you're like 'I've been up all night while you've been sleeping.'

**All:** Yeah.

**Henry:** ..and I'm tired. So I had a chat with the XO. And he was 'how do you think OST is going?' I was like 'I've just joined sir, but the lads are knackered. They'll be driving home sleeping at the wheel.' It's ridiculous, health and safety. You're looking at the lads, he's tired and he's tired but you've got FOST and you have to do certain evolutions, you can understand that, you have to pass them all, get a sat [satisfactory] or a vsat [very satisfactory]. But the lads, I've a few times...had to pull over on the hard shoulder you want to get home, get home safe and get back safe.

**MO:** Absolutely, yeah.

**Henry:** And I know they'll say well don't go weekenders, go to bed. I'm not sleeping on a 5 by 2 mattress when I've got a big king size at home.

**Tony:** Or sitting on the Ship, doing nothing.

**Henry:** What are going to do? Go to bed or go home? Hang on a minute, let's ease back a bit ...look after the watch-keepers, look after

		the night watch-keepers.. .
1	47:47.0 -	<b>MO:</b> Do you think then that if there's more interaction, if you see more
5	51:46.9	of the Captain, more of the XO, more of the MEO, the WEO that those sort of things would be dealt with? They would have more consideration by virtue of the fact that they speak to you more so they know a bit more: <b>Tony:</b> Oh, they know. <b>Daryll:</b> I think if you said to them they would say well that's life. <b>Tony:</b> They'd say it's part of ....its life in a blue one. <b>Daryll:</b> You can ask them but you probably wouldn't get anything. <b>Billy:</b> Life in blue suit is the fucking motto of this Ship. <b>Tony:</b> Yeah. It's these little phrases that are meant to make you smile and you're meant to think, yeah, that makes it better. Well no, it's not. <b>Collom:</b> Especially when they are day workers. <b>Henry:</b> And it is, a lot of the hierarchy are day workers they are day working, they've reached that rank. And they've done duties but now they've reached that rank. They day work, they're blue-carded [no night watches], they don't have to keep duty. And its er...there's a lot of tired boys on here. A lot of tired boys. All it takes is one accident, a car upside down on the M1 this weekend with 4 lads in the back of it. I drove past Mouse on the M6 last weekend and the er...you[Heimdal] were in the back asleep, you [Tony] were in the front asleep and Mouse was doing that [nodding] at the wheel. And er..4 in the morning ... got to drive back to the Ship. Do you know? You needed to see it...You didn't even know I was there. <b>Heimdall:</b> I was asleep. <b>Henry:</b> A lot of tired boys. <b>MO:</b> That's not funny is it? <b>MO:</b> Right this is my last question really although it's the same question worded a different way. What would you think would happen if the Command Team doesn't interact? <b>Billy:</b> To be honest I don't think we get that much anyway so.... <b>Henry:</b> I mean we get the XO every night when he does his evening rounds. <b>Tony:</b> I think the XO does answer your questions. <b>Henry:</b> Yeah he does. <b>Daryll:</b> Yeah, I think he does tell what's going on for the next day, that's all really. You can ask him questions and he'll try and answer but ... <b>Hattie:</b> He will try and if doesn't know the answer, he will look into it so...he will investigate... <b>Tony:</b> Sometimes, the answers that he gives they can be a bit vague. <b>Billy:</b> You get that a lot. <b>Tony:</b> So you ask him a question and he won't give you a straight answer really. <b>Daryll:</b> Like we will be getting up between like 8 and .....8 at night...[laughter]

		<p><b>Tony:</b> Yeah.</p> <p><b>Billy:</b> Half the time it's just something to shut you up.</p> <p><b>Tony:</b> It is. Yeah it is just something to er...</p> <p><b>Henry:</b> But that's more the XO's job. To disseminate the Captain's orders or requirements. It's actually the XO's job isn't it? To look after the personnel on board. Eventually to be a..Captain.</p> <p><b>MO:</b> Eventually, yeah.</p> <p><b>Henry:</b> So that's why the XO does Evening Rounds. We don't see the Captain that much but we've got a job to do..</p> <p><b>Collom:</b> I think on a personal note, the Captain, he talks to me quite a lot about what we are doing and stuff. I mean yesterday it was quite early that he told me that we're not going anywhere. Because of the weather and that. But that's because I wait for him and that and I'm in a sort of relationship to er..unlike everybody else on 2 deck. But the skipper [Captain] does like, he was in the Galley today like...grazing....and he's like 'what's for lunch?' and having a chat. I don't know if he gets round to the SCC [Ship's Control Centre]...</p> <p><b>Henry:</b> Yeah, he does pop in there. Yeah.</p> <p><b>Daryll:</b> He always comes and asks how you are and what you are doing.</p> <p><b>Henry:</b> Our Captain is quite approachable.</p> <p><b>Daryll:</b> He is, yeah.</p> <p><b>Henry:</b> He's not... We're talking about people skills again and you do struggle with conversation.</p> <p><b>All:</b> Yeah.</p> <p><b>Billy:</b> Oh, aye.</p> <p><b>Tony:</b> Oh yeah, he is dry.</p> <p><b>Henry:</b> It's not because....he is a bit dry isn't he?</p> <p><b>Tony:</b> Yeah, but I think that's just his personality.</p> <p><b>All:</b> Yeah.</p>
1 6	51:46.9 - 52:08.4	<p><b>Henry:</b> But he does get around. His personality is...not a clash but he's hard work to start the conversation...</p> <p><b>Tony:</b> And keep it flowing.</p> <p><b>Henry:</b> Keep it flowing.</p> <p><b>Tony:</b> You can start a conversation like 'how are you?' and stuff like that. I think continuing it would be a bit hard because you would run out of topics to talk about.</p>
1 7	52:07.3 - 55:11.3	<p><b>Hattie:</b> Obviously the Command structure is just there to keep the information flowing isn't it? Once you know you can crack on and...The Command is there to make sure jobs get done..</p> <p><b>MO:</b> Yeah, absolutely, yeah.</p> <p>Right OK, that's just about it. Is there anything else that you want to say that ...as I say, it doesn't go back to the Ship. It just helps me to focus on the research which start next year.</p> <p><b>Billy:</b> It's just that planning thing...</p> <p><b>All:</b> Yeah.</p> <p><b>Billy:</b> That's the most annoying thing. It's the one thing we will moan about like, not being able to plan.</p> <p><b>Daryll:</b> Its planning your life. Your leave.</p>

**Billy:** Courses, leave.

**Tony:** 'Cos when lads are on courses we've got to do extra weekends for those lads and I think its just a little bit too much. Especially at the weekend, you're duty weekend when you've only just had one off.

**Daryll:** A few of the lads made a point about oue Easter leave, we only got told like a week before our leave I suppose that we were on 20 hours notice during leave and that. You know if someone booked a holiday and you think, well, can I actually go now? Especially over a leave period, any other time, you'd be like: 'doesn't really matter'.

**Henry:** Well do you know this summer leave period, we're not going dead.

**Anon:** What, what? Say again?

**Billy:** Found out yesterday.

**Tony:** No didn't know that.

**Henry:** We've got to cover 12 days over summer leave.

**Daryll:** Really?

**Henry:** Yeah, we've all got a three day stint over summer leave, us and the [HMS] Blyth.

[Murmuring, several voices talking at once]

**MO:** Sorry, Hattie just said something there about how you conduct yourself.

**Hattie:** As a leader ...er...Command.

**MO:** So how do you think you should conduct yourself?

**Hattie:** Right, I think you should be calm and collected at all times. To get the message across which you want the individual to carry out. And if it all goes to pot, don't lose your rag. You know, adapt and overcome. Go through the options you've got for resolving the situation. That's in the Mob {Navy} but even in the Army, it's how the individual is, how he speaks to you, body language and....

**MO:** So it's using authority, not being afraid of it and being calm.

**Hattie:** Yeah. You want the individual to carry out the job at hand, you know.

**MO:** Right OK, Anybody else?

**Hattie:** And obviously that's where you get your respect from....

**MO:** Well OK, thanks very much. You've been very forthcoming. .

## Linked Memo

Memos\\Cliques

## INTERACT FOCUS GROUP 4 – TRANSCRIPT

DATE 23 April 2012

VENUE HMNB Clyde Waterfront Education Centre – Classroom 3

### PARTICIPANTS

Name	Gender	Age
Jonah	M	30
Kenny	M	32
Spike	M	24
Baggers	M	26
Briggsy	M	23
Taff	M	28
Gary	M	28

0:00 –  
11:05

### TOPIC 1 - THE VALUE OF INTERACTION

**MO:** OK, so the first topic is ...er...how important is it for the command team to interact, and by that I mean the Captain, the officers and also the senior rates to interact with you, the operators and maintainers, erm...and by that I mean: during big operations, during exercises and also in-between, like when you are storing ship or just normal day to day business, does anybody have a view on that? How important it is to have that interaction?

**Jonah:** I think it's very important to be clear and honest ..it's very important....you know where you stand then and what's required.

**Kenny:** You see a lot of it on the smaller ships..erm..interaction more with the officers. But on big ships and that they tend to separate from you.

**MO:** OK.

**Kenny:** There, they're not interested at all, really. It's like, 'I am an officer'. You get no respect, you get tasked...

**Spike:** I think..I think it's better on small ships...like following on from what he's saying. On a big ship it's like, they're there, whereas I'm down here. They tell you what to do and you go do it. But on a smaller

ship there's a bit more like a social aspect. They will ask you about your weekend or something, not just like you do a job, do whatever you are told, know what I mean?

**Baggers:** Small ships are a different navy, I think as well.

**Spike:** Yeah.

**Baggers:** I have had both ships but like they said, there is not so much of a divide, because we all work so close together and we all socialise together, so its more of a ....

**Briggsy:** There's more respect.

**Baggers:** Yeah.

**Spike:** I think as well.. the officers get a feel for how morale is on board, so they view how...how the crew is, you know? If they just speak to you normally. So if you are speaking to somebody, like the two-ringers [Lieutenants] or the YO [Young Officer] on board, when you speak to them you can just say 'ah, this is fucking shit this is.' And they will know that there is something wrong. Whereas if you just speak to them like reference work, they won't know what's happening.

**MO:** OK.

**Briggsy:** I think it quite good if they erm..know the limits of the men and the job, especially if its quite a high task. And you've got you know..erm ..some of the guys will struggle and erm..some guys not so...[mumbles] so that's very important.

**Spike:** Not everyone can be a stoker [marine mechanic].

**All:** (Laughter)

**MO:** That's true. So OK. Does anybody disagree with that? I'm getting that you prefer small ships because there is more interaction.

**Spike:** On the interaction front?

**MO:** Yeah.

**Spike:** I would say only on this crew. I came back from the Gulf with this same crew, but they were a different Command Team.

**Taff:** (Mumbles)

**Spike:** Exactly..that was the people away in the Gulf with us and yeah....er...I don't like to ...er I can't..one Captain and then the XO[Executive Officer]..and to be honest...the only way I can explain...complete cunts, both of them...seriously.

**MO:** So what was different?

**Spike:** You probably know them.

**MO:** I don't need to know who.

**Baggers:** The feeling is with the old Captain, and the old XO is there is no communication between the old Captain and the old XO because....other ships were running their routines that we never saw the whole time there and whole command in general, not the command we have now...the whole last command in general were just...[mumbles] they just looked after number one. Playing things back...there were..like with the curfews...I mean curfews are curfews but then when somebody..say somebody was adrift [late], somebody, senior rate, officer...doesn't matter. We got punished more for it. There was one point where we weren't allowed to go ashore [leave the ship /liberty] because one of the senior rates were late but then the

senior rates could go ashore. When we tried to discuss it with the Jimmy [Executive Officer] during Evening Rounds[inspection]...all she used to say was 'it's not me, it's the Captain, I'll get the Captain, do you want me to get the Captain?' And the old killick of the mess [rating in charge of the junior sailors] said, 'yeah, get the Captain down here.' She come back down 5 minutes later and she said, 'oh no, no, he's not coming down here, he wants one of you to come and see him. So when he went up to go and see him, the Captain was like 'I didn't know about this.'

**Spike:** She was backed..like she was backed into a corner, she supports that..pulling rank. She's like 'you're being' 'like back-chatting and stuff.'

**Baggers:** Prime example again, and this happened a number of times when, for example when during defence watches in the Gulf, there was supposed to be a signal in the ops room which wasn't asked for by one of the Command and then when the Captain asked his Command where it was...the reply was : I've already asked it, he's ..he's just not bothered. The Captain then went in to re-brief [sanction] his lads to say 'Why hasn't this been brought in, it's very important.' The lad said, 'Well..I've only been on watch half an hour and nobody's even seen me.'

**MO:**OK, right...right.

**Baggers:** Do you know what I mean, so because they knew that they had messed up on that front, they tried to roll it down hill.

**MO:** Right OK, so they were frightened of making that known that they

...

**Baggers:** Yeah, 'cos they couldn't explain it....'cos when you are out there[mumbles]

**MO:** So the issue there in this particular instance, when you are out in the Gulf the interaction between the Command Team...

**Baggers:** There was no interaction.

**MO:** ...and yourselves, was there interaction in between the Command Team, did they talk to each other?

**Baggers:** Yeah they all went ashore together and didn't socialise with us or...whatsoever..which isn't a bad thing. But there was a couple of times when we were out and you do see them, and you do say hello, and they just dish you off.

**MO:** OK. The guys you've got now, I mean I don't necessarily need to talk about your particular Ship but...

**Baggers:** They are definitely better, the ones we've got now. I mean from what we've seen so far, brilliant. The Captain...the Captain so far seems quite good. He will interact with the lads. He's not afraid, he knows that like because we just done OST [Operational Sea Training] there, he knows when people are busy...he's been out and helped with things.

**Taff:** I've had previous Captains, obviously and previous wardrooms [officers] and senior rates that have not even given us any...I mean even talked to us during the working day...I mean completely blanked us. But as soon as you step ashore they wanna be like your best



friends and do everything with you. And its been the opposite way around aswell. They're like pals with you and then you go ashore and they are like...'go away peasant' kind of thing. You're just like..you know...And like trying to say to people, 'why are you talking to him for? He's the boss, why don't you come with me?' And I think if I spoke to anyone like that ashore, they'd go back to the Ship and when I got back, I'd be like getting done for it. OK so its just little bits and bobs, so they like..need to know when is the time and place for things. Because like...not me personally, I don't like to go shoreside with them like officers ashore because I don't think you should really but on small ships its quite hard they're not many people ashore and then when you go sometimes go somewhere or ...work...they'll talk to you, but when you do something wrong, they're down your neck. And you're like 'but you was with me.' They can't have the balls and say 'I was there.' Instead of just trying to keep your rank and keep everything cushty [mumbles]

**Kenny:** You've got to remember though that if you do make a mistake they will have to bollock you. You have to put it the back of your mind, it's done and dusted...and move on and the next day..you're still having that task [mumbles]

**Spike:** There is a line there.

**Kenny:** They will have to one day order you to do something that is dangerous and you will have to do it....[mumbles]but you always have to remember that.

**MO:** Does everybody agree with that?

**All:** (Yeah)

**Jonah:** Yeah definitely, I mean there is that line there.

**Taff:** Yeah but people use that too much, you know. I've had someone try and send me back to the ship when they've been absolutely steaming , just because they are above me in rank. I might have had a few drinks but I am just messing about and I have got to go back on board...and I'm like, 'why aren't you going back? You won't even remember in 2 minutes, if I just left the pub and went to a different one...you're not even going to remember.'

**Spike:** I'm with him on that one, like. There are people who are on the higher rate who I would rather not spend time with. Like you say on small ships, you haven't really got a choice. But when you are ashore and people have too much to drink and then you start...getting gobby and they are a higher rank than me, they start being funny and to be honest...when I've had a drink. I don't even listen to people, I just start getting rowdy...you know ....just kickoff...but it's even worse then....

**Baggers:** Its like when we had two people out in the Gulf, before the curfew in a group, because you have to be in groups out there, and you come back and they're back before the curfew. And they've got M.A.A.'d [Minor Administrative Action: discipline procedure]. They've followed the normal rules but what they've said was, 'well you never told the Ship, to say you were coming back'. Coming back it was like[mumbles]

**Spike:** But before the curfew they were sober

**Baggers:** Oh yeah, they were sober

	<p><b>Spike:</b> All they done was, they come back to the Ship where they're ,meant to be and they got in trouble for it. [Laughter]</p> <p><b>MO:</b> Has anybody else got anything to say on that interaction....does it have to be the same ashore as it is at work..or is there definitely a line?</p> <p><b>Baggers:</b> No, no...like Taff was saying there has to be that line there ashore but like we were saying you do need to remember there is that line at work and there will come a point where it...it..it can't be 'I'm your mate', it has to be 'do this' do you know what I mean?</p> <p><b>MO:</b> And what do you think about that?</p> <p><b>Gary:</b> Erm..yeah...but I've only been small ships for what five...six weeks? We've just done an OST [operational sea training] period...so its all new to me. It is a lot...both officers and senior rates.</p> <p><b>MO:</b> How do you find it, that difference..good, bad or indifferent?</p> <p><b>Gary:</b> Much better, eh?</p>
<p>11:05 – 17:30</p>	<p><b>TOPIC 2 - WHAT CONSTITUTES GOOD AND BAD INTERACTION</b></p> <p><b>MO:</b> Well thanks very much for that, erm..that sort of leads me on to my next question really, which is..er..what kind of interactions...similar question really..what kind of interactions are appropriate and when? Perhaps you might want to elaborate a little on what you said before.</p> <p><b>Kenny:</b> I remember being with the Captain on the [mine-clearance vessel] and me and the navigator walking in the hills, because that was our interest. You wouldn't even think of doing that on a big ship. Going walking with the Captain, that was something I done in the past and you could even speak freely with the Captain any time I wanted on board any time..literally. Another Captain as well that was like that..so...</p> <p><b>MO:</b> Do you think it is important to have that experience? To talk to the Captain about anything?</p> <p><b>Taff:</b> Yeah, yeah. I think you should be able to, I mean he is a human being at the end of the day. And you shouldn't be frightened, if you've got something to ask, I think he would prefer you to ask. I mean if it's a stupid question, he would prefer you to go to someone else first. [laughter]You know you have got your command chain, you should go the kellick first and your senior rates and blah blah, but if there is something..you need to speak to him. I've never had a Captain that's said 'Don't come and see me.' If you've got a problem, go and see him straight away.</p> <p><b>MO:</b>OK</p> <p><b>Baggers:</b> I've never had that either. But again...again talking about this command and our last command. Our Captain is chasing us to play football with him and and comes and plays football with us and we get a sports hour everyday because of our routine and things..our last command was none of that....none whatsoever. I had to fight tooth and nail to play rugby when we were on a Sunday [relaxed] routine when we were out in the Gulf. There was no ship interaction</p>

unless the junior rates had planned it themselves and say to a couple of the senior rates that were there, 'Do you want to come?' and that was fine. But [mumbles] our Gunnery Officer he was constantly....I went up to him and I said....our XO as well..in fact the whole command. If I went up to them and said I can't get the gym for 3 O'Clock today there is only 1 O'Clock, they would say, 'Right, book it.' And we would all go up for 1.

**MO:** Yeah, OK.

**Taff:** I think that comes across as ..we said it before..if your Ship...a lot of the officers and the senior rates are quite active in sport, they enjoy playing sport then you will get your sports hours. If they are not, you've got no chance.

**Baggers:** Our last command, they were all active but they was going to the gym every day and they were more willing to do their own stuff, they weren't...

**Taff:** Yeah, yeah. I've seen a lot of that going on. They'd go off and leave you digging out [working] until ridiculous o'clock and...

**Baggers:** Yeah.

**MO:** So actually doing sport with the senior rates and the officers on board, that's a good thing then?

**Taff:** Well, yeah. It's the same thing you know. A lot of people get a lot of trouble for not doing their fitness test and that but you know, there's got to be a lee way. If the Ship's not giving you time to do any kind of phys. You know..OK you do phys in your own time...you should use your own time as well. But there should still be that little period when people should be allowed to go up and do it. So that the people who enjoy going to the gym don't get the time off but as soon as you fail your fitness...you get time to....

**Spike:** Stuff like transfers onto the Ship. Like team-building...I remember when ....like...we were in OST there...I did two OSTs on a big ship...I was a carrier rating [served on an Aircraft Carrier] and they ....on these ships you have to dig out [work hard] when you are OST like. But everyone does you know...like..

**Baggers:** Everyone's going for it..

**Spike:** Everyone's just going for it..you know what I mean. [mumbles] I'm trying to explain like but it is...like..everyone's pulling in one direction...[mumbling] one in, all in.

**MO:** So quite happy to have a knock about with the command team, game of football, something like that?

**Briggsy:** Yeah, yeah. I think it's good. I think maybe[unclear in audio transcript] [Laughter]

**MO:** How about yourself, Gary? Happy to have a knock around with command team, game of football?

**Spike:** Why pick on him?

**Gary:** Yeah yeah [mumbles]

**Spike:** He's a bad loser. Gets in a huff. [Laughter]

**MO:** OK. Thanks very much for that. So what about...just still on this, er...what kinds of interactions are appropriate and when. How about that in a work context during the working day, what's appropriate then.

	<p><b>Taff:</b> Sometimes it does get a bit bad because, you know, once you've had a few be vies, you know, the night before. And your talking about the dits [stories] from the night before, if they're any officers there and you're chatting on and then someone else turns up i.e. higher command..like turning their head, they don't wanna speak about it. Which is fair enough, do you know what I mean? But sometimes then, somebody will mention talking about the night before to someone who is high in command and then that gets you into trouble. You know there is a time and a place where you should tell and its not really your dit to be spinning [telling the story].</p> <p><b>MO:</b> OK. Anybody else got any thought on that?</p> <p><b>Spike:</b> There was like...this one officer, he always shows his face in the SCC [Ship's Control Compartment], he always comes in the morning, see how everybody's getting on and that. That was always good, it's nice to talk. Like, show he's taking an interest, you know what I mean?</p> <p><b>Unknown:</b> Absolutely.</p> <p><b>Baggers:</b> That, that, that, like you're saying there, you do need a...sometimes you do need to remember that sometimes they can or [mumbles] they have a duty of care of following that up.</p> <p><b>Henry:</b> You've just got to remember and be professional, I mean they're no t[mumbles].</p> <p><b>MO:</b> OK and we've talked about being ashore so we will leave that where it is. OK erm...</p>
17:30- 18:52	<h3>TOPIC 3 - HOW DOES INTERACTION AFFECT PERFORMANCE</h3> <p><b>MO:</b> So my next question is, how does interaction affect performance, is it...really what I am asking is: is it a nice-to-have but it doesn't affect performance that much or do you think it is actually beneficial?</p> <p><b>Spike:</b> I think you have to have it or else....I tell you something when we were in the Gulf. If they wanted something doing? Couldn't give a fuck to be honest....you want something doing? Do it yourself.</p> <p><b>MO:</b> Hmm, right, OK thank you...</p> <p><b>Spike:</b> Unless the actual requirement was written, unless someone in my department needs it and I'd do it if it was a requirement. But if one of the hierarchy asked me to do something....I just won't do it [laughs]. I mean if was completely against naval..if it was a command, if they say do something, you do it. But I just hated them so much , I just say 'no'.</p> <p><b>Henry:</b> I think it's about respect really, you know, it works two ways not just one way...actually.</p> <p><b>MO:</b> Anyone else on that one?</p> <p><b>Jonah:</b> If you think more of them, you're going to work harder for them aren't you?</p> <p><b>MO:</b> Uh-huh. OK. Anybody disagree with that? Do you think, I get my orders, I do as I'm told, I don't need any interaction?.....[Silence] Do you definitely think interaction is going to help?</p>

	<p><b>All:</b> Uh-huh, yeah.</p>
<p>18:52 – 23:54</p>	<p><b>TOPIC 4 – FORMAL AND INFORMAL INTERACTION</b></p> <p><b>MO:</b> OK. We've spoken about, I suppose really. Social interaction but there is another sort of interaction, sort of information: Daily Orders, that kind of thing..erm..How do you think , is that a useful thing for you, Daily Orders, for instance, as a form of interaction.</p> <p><b>Taff:</b> Not at all 'cos...</p> <p><b>All:</b> [Laughter]</p> <p><b>Taff:</b> 'cos Daily Orders usually comes down and it usually says 'remain flexible'.</p> <p><b>All:</b> [Laughter]</p> <p><b>Taff:</b> So you don't actually know what is going on.</p> <p><b>Baggers:</b> Well that was during our OST period when we didn't know, nobody knew what was going on. One minute the Ship was working and then the next it wasn't and then it was working again....it was just blooming...yeah...yeah ...we were trying...it was just 'remain flexible' constantly but there was nobody to blame for that really. Now that we are out of OST and we're back in a structure.</p> <p><b>Briggsy:</b> We're alongside, day-running.</p> <p><b>Baggers:</b> We've been able to follow it [Daily Orders] as such.</p> <p><b>Spike:</b> There's not much really that's come out on this Ship, not like big sort of thing when it comes to information but I think the information...getting passed through the Navy on the whole is not very good 'cos ..er...when we had that volcano went off? We had people stranded in er...France...I was on another ship anyway. But we were getting told...we were going on BBC News because the Navy was so slow at passing information down and getting transferred. It was quicker just to look at the telly to look at where you were going.</p> <p><b>MO:</b> And what effect does that have on you if you are not getting good information from the Navy per se or if Daily Orders is just, you know, a minor fiction.</p> <p><b>Spike:</b> It's not good , like, 'cos you're on the phone and your talking to your missus and you're like 'we're not going there'. BBC News say are though [laughter].</p> <p><b>Baggers:</b> It's funny how the taxi drivers outside the Base know more about the Ship's movements than I do.</p> <p><b>Taffs:</b> It's like your drafts [assignments to ships]. People know where you're getting drafted before you do. You're like 'no, I'm not going there.' ...like... 'yes you are'...'oh, right.' Then the next minute, two or three days later up on JPA [personnel administration system] there's a draft order. And you're like 'oh,good!'</p> <p><b>Henry:</b> Four ...four weeks before I was joining ship, they're like your down to do crew four, crew two and I was down for ISSC [Intermediate Sea Survival Course]. I was down for like two, four...eight..[laughter]. I didn't even know what crew, I was like...I had phone-calls from Squadron [parent unit] 'oh, you could be joining this one.' 'OK.' 'I've changed my mind, you're joining this one now.'</p> <p><b>Spike:</b> I was joining crew five until about two days before I was joining</p>

crew2. Been there ever since.

**Jonah:** There is a manning problem when it comes down to it...

**Taff:** But like..what I don't understand is how I had to do ISSC before I joined the Ship and...and they managed to get me an emergency ISSC and an emergency shoot [small arms training] just to get me to join the Ship. Why couldn't they just put an emergency one to get me on a Ship anyway? So like if manpower so rubbish at the moment, they should be like 'we've got a lad here who is out of date for ISSC and a shoot, let's get him out there so we can get him on another Ship.' So that Ship sailed which didn't have enough manpower and....

**Baggers:** Manpower's that short...when we came back from Conniston Crew I was the only person available and I did three OSTs, three two week OST and I did my one OST and I was supposed to be having a bit of time off to be able to get home and things like that and that was it....

**MO:** An OST officianado?

**MO:** Because you are all changing crews and doing the roulement thing, do you get much interaction through that process or are you..do you end up...you know...do you end up...have you got a Divisional Officer who gives you information through that process?

**Baggers:** Well It's...again..it's information getting from shore side to on ship because...one of our Ship's Company, he got pulled for a different crew for during their OST and he found out something like two days before, the Navigator told just as he got off the phone. They must have known longer than that. I mean...and because again manpower is so short, the duties are what? Something like...

**Background:** One in two.

**Baggers:** One in two [one day duty, next day normal work]. And that's taking another one out of the roster [watchbill].

**MO:** Yeah, OK. Right, OK. Thanks very much. Has anyone got anything to add on that?[Silence]. I won't....obviously...I won't necessarily pass on my own comments at all. I am just letting you know that because I am only interested in what you have got to say. I already know my own opinions.

23:54 –  
29:56

## **CO'S AIMS AND OBJECTIVES**

**MO:** Erm..so my last one really: how do you personally find out about the Captain's aims and objectives?

**Gary:** Our Captain just tells us.

**MO:** Face to face?

**Briggsy:** Yeah, get everyone in the hangar, you know, clear lower deck.

**MO:** Sorry, what was that?

**Briggsy:** Clear lower deck and tell you what you already suspected.

**Spike:** Or if you're a tabber [smoker]. He'll tell you when he's having a smoke with you [laughter].

**MO:** How about yourself, how do you get to find out about the Captain's aims and objectives?

**Gary:** Erm...erm...it comes through the chain of command really.

**Baggers:** Yeah, weekly planners [planning meeting], usually someone comes down after and tells us what's happening.

**MO:** Erm, would you say that you basically happy just to get that through the chain of command, so if you didn't really ever see the Captain, you didn't speak to him ...when you are having a cigarette or whatever, you'd be happy just to get that through the system,...Daily Orders...

**Baggers:** Yeah, [.....] you usually find out from Weekly Planners and things. But again, because it is so small, you just ask 'what is happening?' You know what I mean? 'Well this is what we've got, we've got Weekly Planners tomorrow.' Any changes, we'll find out from whoever is at the meeting, or someone will tell you.

**MO:** Ok, anybody else?

**MO:** Would you say that you generally know what the Captain's aim is at any point in a normal working day, or an exercise, Sea Training?

**Taff:** Yeah, the Command Aim? Yeah.

**Briggsy:** Yeah...You usually know the Command Aim, or it will be piped [broadcast].

**Spike:** You generally know what we wants anyway , like. 'Pass OST' [Operational Sea Training] [Laughter].[.....]

**Baggers:** There was this thing before OST . I don't care what the routine is, we all work together as a team. I'm happy. Pass OST. We can all go back to the normal routine.

**MO:** So do you think that because you are a small ship you just know what the Captain's aim is anyway...

**Taff:** They don't change much do they? You know. Most people in small ships have been doing for a while unless they just come off big ships and that. And most of them know something or they don't and they are like 'how does this thing work or handle[...] different [...] from their opposite number. All the Captains are more or less the same. You obviously get some that are better than others but most of the time you know exactly what he wants.

**MO:** Is it useful, the Command Aim? Does it affect how you go about...

**Jonah:** It depends on what you are doing. During OST the Command Aims are...they're what you go off. But ...don't know really...just transitting [on passage], you're just transitting. I don't know, I've never been in a situation where it hasn't been pretend..sort of thing.

**Spike:** When you go to sea just doing something, you get the same Command Aim which is 'safe navigation'. Just that really...pointless really, you know.[laughter] Safe navigation...we don't want to crash into anything [laughter].

**MO:** So let's say you're in a main machinery space fire or something like that, would you be listening out for the Command Aim at all...

**Jonah:** Oh definitely, yeah.

**MO:** So that would guide your actions? You wouldn't think 'oh, I know what to do, I've done this a hundred times'.

**Baggers:** No you listen after your Command Aims. 'cos again its maintaining the ship [keeping it safe][...] Yeah if you've been part of

	<p>the first aid team, casualties can't come first all the time...depending on the scenario.</p> <p><b>Taff:</b> I've been in situations like that where the Captain has come down to see the re-entry [fire-fighting team] before they have gone in and made sure everyone is happy [...] to do stuff, you know, 'c'mon lads, get in there and do this job, get it over and done with.'</p> <p>Sometimes that gives them a boost, just making the effort, because he's sat on the Bridge, he's made an effort to come down.</p> <p><b>Spike:</b> Like, if he's come down to see you he's like he's come to see you, you know what I mean? The lads who are going in, because if he's on the Bridge, like, he doesn't know who's in here. But if he comes down to see you like, give you like a bit of inspiration to go in, do you know what I mean?</p> <p><b>MO:</b> Jonah, what about yourself, if you in a main machinery space fire, the Captain comes down, do you think that's a good thing or do you think it is unnecessary?</p> <p><b>Jonah:</b> I think face to face is always better isn't it?</p> <p><b>MO:</b> Anybody else?</p> <p><b>Henry:</b> Yeah, again...face to face. It's a token effort, coming over main broadcast. Coming down just shows that you're there.</p> <p><b>MO:</b>OK. That's great .</p>
29:56 – 43:17	<p><b>MO:</b> Thanks very much, that's actually all of the things I have down here. We've done it a bit quicker than normal but that's fine, I've lots of good stuff there. But to sort of finish off. Just generally as you've sort of gathered I'm interested in interaction and how you interact with the Commanding Officer, with the Senior Rates and the Officers, has anybody got anything to add to what we've just discussed about what you think makes for good....if you could have your own perfect ship, what would the interactions be like?</p> <p><b>Taff:</b> Get the officers down onto ...onto the parts of ship [work areas] and see how it works...[agreement]because that's a massive big one on a small ship, they tend to not realise what goes on down there and ...you know they do stuff down there [...] you know, shouting at them and they're wondering why things go wrong, they're giving us..like its our fault..it's not. Its just little things like bringing a sea boat alongside the ship. They're saying they're not doing anything but they are thrusting us off [using ship's thrusters and unknowingly pushing off the sea boat with the wash]. Sometimes it can cause an injury, you know, when you're trying to bring a boat alongside [...] you know...the boat can go [get pushed away from the ship unexpectedly]. Previous one on OST, you know, and we were coming to a buoy [securing the ship to a mooring buoy] and they are coming astern on the buoy, you know, we don't need that you know, the wind's about 30 knots and they are coming astern, you know, we're trying to hold that on a hawser [thick berthing rope], there's no way we can hold the ship.</p> <p><b>Gary:</b> For some reason that's phased out because that used to be a thing for the YOs [young officers] didn't it?</p> <p><b>Taff:</b> Yeah.</p> <p><b>Gary:</b> They used to <i>have</i> to come down to parts of ship.</p>



**Taff:** Yeah.

**Gary:** Then about ....

**Taff:** Just taking them out[...]working. That's like when I was on my previous crew, the officers were still young and they hadn't seen what we do. They'd go down to the Boatswain to see what they could do and I would say 'no, I want them on the boat, I want them to go in as bowman and see what its like' [...] and think 'oh actually, I can see what's going on here.'

**Baggers:** It's one thing [...] how that serial goes when you're on the Bridge but to be down there and have your own perspective and know how exactly things are and what exactly is happening. 'Cos it doesn't always run smoothly. A few times we've had cranes tripped and things like that as its[the sea boat] is coming up, you just need to be down there ....

**Spike:** Certain things....

**Baggers:** And like I say you get things from the YOs[...]

**Spike:** Some things they don't put in task books and they should like, when you're using the bow thrust? And its not more the officers, its more the lads, do a [...] on the controls and they don't think, they just think 'oh, I'm going to port' or 'I'm going to starboard' or whatever.

They need to be able to see what they do to the generator because the requirements of the generator exceed what it can do and then it trips...and then you have a total electrical failure...and we get in the shit for it, but its not our fault [laughter]...its because they are asking too much of the generator.

**Taff:** It's the way they speak to you aswell. Its bad, you know, as regards the time it takes, you know, like VSP changes and that. They shout down 'what's happening, what's happening?' They don't realise the time restrictions, how long it takes, you know. Because we've got to patch it to there and then they go down and do the stuff and we've got to regain it back, and they're like repeating 'what's going on?' And we're trying to get something done and once it's done, we'll tell you its done. Instead of going on 'what's going on, what's going on?' [...]

**Henry:** And sometimes instead of going step by step on the breakdowns, sometimes they jump it? And then..and then you have to try and catch up on it?

**MO:** Right.

**Henry:**[...]

**MO:** This is mechanical break downs?

**Henry:** Yeah, yeah. A few times it's like [...] because the officers on the Bridge miss the steps out.

**MO:** Right [laughs]

**Henry:** And your like...

**Taff:** And he's like, 'what? What part are we on?'

**All:** [Laughter]

**Gary:** Although they are under pressure from the Bridge of the ship and stuff like that. They...like you said they do need to take time sometimes, not everything can be done at lightning speed....it's not like we're down there having a wet [cup of tea] or anything [laughter].

**Taff:** It's all part of understanding the task again, especially the erm...timings really. [...] trying to rush things on when they do break down.

**MO:** OK, so thanks very much for that...so..I'll just ask that...so has anybody else got any views if they had their perfect ship...you know..how people would interact with you and how you would all treat each other on that ship.

**Spike:** We'd be going a bit off subject with my perfect ship..it would be..[laughter]

**Briggsy:** Having people all trained before they joined the ship.

**MO:** Right, that wasn't as bad as I thought it was going to be [laughter].

**Taff:** No I was going to say 'wren-ship' ['wren' means female sailors][laughter].

**Baggers:** During our last OST we had...not being horrible...we had too many passengers, too many people who couldn't work or who weren't trained at anything really. A lot of them are off at the minute on courses and things [...] It should be a thing, where you come out of training and do your courses right away, instead of coming RPA [?] or sitting in Portsmouth for 2 or 3 months.

**MO:** Is that more important than, say, you know...for the guys who are in charge, so the senior rates or the officers?

**Baggers:** Yeah, u-huh. That benefits like...the officers and that as well 'cos they're all guns trained before they join the ship and then its all local [training] after that. And its something we can train them up in.

**MO:** OK.

**Baggers:** Especially during a period for OST and stuff like that.

**MO:** So you don't think that the leaders on board just need to know the bare bones of things, because you can manage anything, you just leave it for the people who are hands-on to know how it works, or do you think there is more respect for someone who does know how that bit of kit works?

**Taff:** [...] you're talking about a bit of kit and they ask you about it, you think, 'yeah well at least I am talking to someone who knows', whereas if they are just blabbing on and you think, they don't have clue what they're talking...you're completely talking rubbish.

**MO:** OK, anybody else....

**Taff:** But back onto the manpower, they're bringing people up here and they're just sending them to like..learning centres and stuff like that. Why can't they just put the people in their branches [professions] on a ship to work with a [that] department. So they can learn their jobs and so when they do come to a ship, they're not going 'I can't remember nothing.' And then just walking around [...] Plus you are always needing manpower because you've always got people on courses. OST is coming up or something like that and you can always use the manpower.

**Baggers:** We've just finished OST and we're going to have the OSTies [sea training staff] back because half of our manpower wasn't our own.

**MO:** So ...erm...just to round it off, what sort of character would be ideal, I'm interested in anybody who has a management or a leadership position, let's say who would be the ideal sort of Captain, what sort of character would that be?

**Spike:** Nelson [laughter]

**MO:** Nelson?

**Spike:** Yeah

**MO:** Right. [laughter] Be careful what you wish for. [laughter].

**Baggers:** He was quite strict. [laughter].

[...][laughter]

**MO:** So what do you mean by Nelson, or are you just saying that?

**Spike:** I'm saying that because he was 'nails' [tough] to be honest. He was a wild card.

**MO:** You like a maverick?

**Spike:** I want someone...that...it's hard to explain what...I know...that your saluting...when you salute, you're saluting[...].like the Queen. But I hate the way people..again its not so much on the small ships. The way people see officers...they see , oh you've got to get it done. He's just a person, he's nothing special. Just because he's got them rings on his shoulders, doesn't make him anymore special than what you are ....know what I mean and it annoys me. And about Nelson, tell you about that. He....'don't engage the Spanish Fleet'. And he thought 'Nah, I'm gonna do it anyway.' So they just went and done it.

**Henry:** What you're saying, Spike, is that the perfect Captain for you is not a yes-man. He'll stand up.

**Spike:** Yeah [...]

**Baggers:** Someone who will looks after his crew more than trying to please shore-side [administrative authorities].

**Spike:** Hmmm. That's a good way of putting it.

**Baggers:** Yeah.

**Taff:** We definitely need more of that because there is too much going...yes...'let's do this', 'let's do that'..like 'you can handle that.' The lads are absolutely hanging out [tired ] and there's more to come.

**Spike:** And the thing is..as well..when you're in the Gulf, you're getting told to do something by someone who's in London. We're in the Gulf, you don't know what's happening. They think 'oh, they've only done 8 hours work, they can do 16'. They didn't know that its 50 degrees in the engine room.

**Baggers:** This Captain, he's crew orientated. And he will try his best to fight for us as such. Whereas our last Captain ,he was a shore-side pleaser because of his name and this and that...yeah even though you're looking at him saying if there's an engine problem and you're saying 'this engines fucked...there is nothing you can do.' And to get 'that's not the answer.'....

**Spike:** And he's saying 'you can still go to sea.' No we can't, we can't go to sea, there's no prop [laughter].

**Henry:** We were out in Dubai in 2007 and the XO [Executive Officer] there was two ships, two Sandowns [Sandown class vessels] together and there was two [...]two lieutenant commander [in command of

each ship] but one was like..higher authority [senior] and he was closing up his guns crews on the upper deck and he looked at the other [ship] , the state of it at harbours [harbour stations] going into Dubai[....]

**MO:** Right Ok, Has anybody got anything else to add.

**Jonah:** I was going to say, sometimes you get an officer, wants to make a name for themselves and they change things for the sake of changing them . So they make a name for themselves and its us lot that suffer. You find them, so ...its like change for the sake of change...

**MO:** So they are more career focussed..

**Jonah:** Yeah, you know full well that they are trying to make a name for themselves [...]

**Gary:** Its just a better way to get things done sometimes, is to ask someone rather than to tell them.

**Henry:** Its like when you do a function check, a confidence check , they fucked it all up. When you do a function check its just like left, right, up and down..just to prove you've got control. And now its..they've stuffed it up. Even the OST staff were getting confused. Because some Warrant Officer [Senior Rate] in the ME [marine engineering] department swapped it ....

**Spike:** They changed it for the sake of change.

**MO:** So if someone changes something, they're doing it for career reasons, let's say. Do you think that person is going to want to be there to see that through, that change?

**Briggsy:** Not really.

**Henry:** Its just to look good in front of their hierarchy, no matter what damage it does.

**Taff:** You do get that quite a lot[...] people just trying to skip over people and don't care what goes on underneath you and as soon as like as soon as someone is in there who they want to shine with, you just get treated like dirt. And you think to yourself 'why should I do anything for you?'

**Spike:** That was like our last ship wasn't it?

**All:** Yeah.

**Baggers:** You've got people who look after their crew and you've got the ones who try to please the hierarchy and the situations where again, on your ships , they're not running for whatever reason. Sometimes you just need someone to stand up and say [...]its not working [...]. Instead of trying to wipe..overwipe people.

**MO:**OK. I'm going to stop it there, unless anybody has anything else they want to add..OK, going, going..gone.

## INTERACT FOCUS GROUP 5 – TRANSCRIPT

DATE 15 May 2012

VENUE HMNB Clyde Waterfront Education Centre Classroom 3

### PARTICIPANTS

Name	Gender	Age	Consent
Gary	M	34	√
Phil	M	28	√
James	M	29	√
Mary	M	31	√

	Timespan	Content
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1	0:00.0 - 5:46.3	<h2>OPENING QUESTIONS</h2>
		<h3>INTRODUCTIONS</h3> <p><b>MO:</b> OK, so that's us recording. OK so, my opening question is really just to try and er...break the ice really. And I would just like to go round, from yourself. If you can just introduce yourself, tell me your name. If you wouldn't mind just telling me how old you are. Its just useful background information and how long you've been on the Ship. You don't have to mention the Ship's name if you don't want to.</p> <p><b>Gary:</b> Er..Gary 34...been on the Ship for er..about 18 months.</p> <p><b>Phil:</b> It's Phil, 28. I've been onboard about 18 months aswell.</p> <p><b>James:</b> I'm James. I'm 29 and I've been on the Ship for over 2 years now.</p> <p><b>Mary</b> (Male): Right, Mary ..been on the Ship 9 months..10 months.</p> <p><b>MO:</b> Right, so its Gary, sorry...</p> <p>Phil: It's Phil.</p> <p><b>MO:</b> Gary, Phil..</p> <p>James: James.</p> <h3>INTERACTION – FIRST THOUGHTS</h3> <p><b>MO:</b> James and Mary, I cannot forget obviously...It's alright we've already had a Suzy aswell [laughter]. So...fine. And also when I ask a question, if you can tell me....What you probably won't get from me is a 'yes, I agree' or a 'no I don't agree' because obviously I don't want to influence your responses. So if you don't get anything back from me don't think, you know, 'this is a bit strange.' Because I am not agreeing like I normally would do in a conversation. OK..er...my first question then is what is the first thing that comes into mind when you think about interaction between leaders and followers.</p> <p><b>Phil:</b> Delegation.</p> <p><b>MO:</b> Anything more than that?</p> <p>Phil: Its just getting the task done. You're delegating jobs to individuals...obviously lower down. More important jobs higher up..to get the task done really.</p> <p><b>MO:</b> [Pause] Yeah? And you think that is important? To do that, to delegate?</p> <p>Phil: It's very important, yeah.</p> <p><b>MO:</b> Anybody agree with that one?</p> <p>Mary: Yeah. Especially in the armed forces, yeah. You need that delegation process.</p> <p><b>MO:</b> Right, OK. Why so in the armed forces?</p> <p><b>Mary:</b> Erm...I think, you know, our job is different to a civilian job. And you need that kind of command structure.</p> <p><b>MO:</b> OK...right...OK. Anybody else on that delegation.....</p> <p>James: It's because we're a disciplined force..you need to maintain</p>

that discipline. I think it outweighs it more than the civilian part.

**MO:** Would you agree with that? [to Gary]

**Gary:** Yes. I agree with that.

**MO:** So interaction then...we just mentioned delegation. Is there anything else that comes to mind when you think about interaction.

Gary: Subordinate development. [Pause]

**MO:** Yeah, tell me a little bit more about that.

**Gary:** I think it should be one of the main focuses of leadership, to develop your subordinates and help them to achieve what's best for them and what they want. And if they're not happy in the branch [specialisation or trade] and they are looking for a branch transfer you should be pushing to help them to do that, rather than leave them to the side just because they don't want to be in the branch. Which happens all too often.

**MO:** OK.

Gary: I would say that's quite a big thing.

**MO:** OK. So as a Divisional Officer's role of looking after these guys...

**Gary:** It's his responsibility overall. However, there is the Divisional Officer but there is also the Divisional Senior Rate and the Divisional Leading Hand. And so there is no reason why the Div Senior Rate or the Div Leading Hand can't take most of that on....

**MO:** OK.

**Phil:** That works..that works at all levels though. You pass on your knowledge and your experiences as well to the er....like...the younger people. [...]

**MO:** Is everyone in agreement with that or disagreement with that?

**All:** [mmmm....nodding]

**Mary:** I agree yeah.

**MO:** Is there something in it, when you mentioned branch transfers before specifically? Is there a reason that you mentioned that? You said you see that 'all too often'. Is it something you have a lot of experience of?

**Gary:** Yeah. A lot. In every ship there's always quite a few people wanting branch transfer and I don't think they get the support from the divisional system that they need. Er...I'm not saying everybody..I would say 6 out of every 10 cases that would be the case. And it doesn't get pushed far enough which is what I've seen from it. I know it's all depending on certain things like manning clearances etc. But [...] and it has to be pushed and pushed and pushed and if manning clearance takes 2 years then it takes 2 years. It shouldn't just be left to the side. [...] I believe that if someone feels that they want to do something else in their life then you should be helping to push them forwards.

**MO:** OK. That's really interesting. I'll tell you a story after this about my own experiences with that but er...it's just interesting that you have mentioned that. Thanks very much. Er...so it's really about delegation, subordinate development? Is there anything else when you think about interacting with your..you know..your Senior Rates or your Officers. Is there anything else? We've mentioned delegation and

		<p>subordinate development.</p> <p><b>MO:</b> We've mentioned delegation and subordination [subordinate development]. Is there anything else which is beneficial or not beneficial to interaction?</p> <p><b>Mary:</b> I think a bit of banter goes a long way. You know like a lot of times you're doing a bit of a rubbish job but if you've got that bit of banter going on, that can help a bit.</p> <p><b>MO:</b> OK, agree with that or....</p> <p><b>All:</b> Yeah, yeah.</p>
2	5:46.3 - 9:23.3	<p><b>TOPIC 1 HOW DOES INTERACTION AFFECT PERFORMANCE</b></p> <p><b>DOES INTERACTION AFFECT PERFORMANCE?</b></p> <p><b>MO:</b> OK, so I'm going to move onto my first topic, this is my opening question really, just to get us all talking about it. Erm...the first one is erm...so the first topic I want to discuss is how does interaction affect performance. So my first question, I suppose fairly obviously, is does interaction affect performance?</p> <p><b>Gary:</b> Yes</p> <p><b>All:</b> Yes..hmm.</p> <p><b>Gary:</b> Ah...as a team ..for a team to work...which is the Navy's statement ['The team works.'] its all about interaction between all ranks [...] and all different levels. And....doesn't always happen. And....I ..I don't believe it always should be the divisional structure, just left at that. I think it involves social events, AT [adventurous training] in all...er...messes [accommodation / recreation areas]..gettiing together, interacting erm...like I said social events and going together, things like that. For everyone to get to know each other not just on a professional level but also on a social level and it should...especially on a small ship with 38 people. Erm..when you can be away together for 7 months at a time, away from your families, so I think the social element is quite a big factor. If you don't have the social element, they are just going to treat you as just a colleague and I think it should be bit more like.</p> <p><b>MO:</b> Should be more than that?</p> <p><b>Gary:</b> [Nods]</p> <p><b>MO:</b> So..you're nodding [Mary], so you are agreeing?</p> <p><b>Mary:</b> Yeah, completely agree, yeah.</p> <p><b>MO:</b> So..so you just mentioned social events ..I think you said AT and that kind of thing. Erm...how do you think that helps? Maybe Phil or er..sorry what is your name?</p> <p>James: James.</p> <p><b>MO:</b> James, sorry. Do you want chip in?</p> <p><b>James:</b> Yeah..yeah..uh...I gotta admit...I forgot what was the original question? [Laughter]</p> <p><b>MO:</b> [Laughs]Just aswell I was listening then.. Erm...what we said was erm...If I am right in paraphrasing...interaction is important, I think we</p>



		<p>...did you all agree to that?</p> <p><b>All:</b> Yeah.</p> <p><b>Gary:</b> Definitely.</p> <p><b>MO:</b> You all nodded your heads anyway. And Gary's talking about social interaction and he was saying that because you are away for a long time it makes sense to have social interaction aswell. You mentioned AT and various other ways of interacting.</p> <p><b>James:</b> Yeah, aswell as having to take orders off of people who are above you and if you are living with them constantly, which you are. Its obviously good to spend time with them on a social level where its a kinda level playing field. So yeah..of course.</p> <p><b>MO:</b> And do you think affects performance positively? I know some of you already said yes to that [background: yeah] [Pause] Would you agree with that, or do you think its just a nice to have?[Background: No] A more family feel but...</p> <p><b>Phil:</b> [Interrupts] Its all about team bonding. Like you say at work...'cos its only a small ship you know...you do know your POs [Petty Officers] a bit better...your Chiefs [Chief Petty Officer].But on a big ship you won't. So you know, it's nicer to be able to talk and be comfortable around them and they get to know you better aswell. So...they get to know your character it is..it is good just to have a good [...] together really.</p> <p><b>MO:</b> OK. Thanks very much.</p> <p><b>Mary:</b> I think more importantly on the interaction and social side like...you know. If I am barking orders all the time that person is going to be like thinking, 'He's a dick.' you know what I mean? And then after a while he'll become, you know, unresponsive really. They're not going to be arsed to do what I want, you know what I mean? If I'm interacting, getting out and doing social things rather than [...] They can see that...like...he's an alright guy, it's just that in a working environment, he's got to put that hat on then they are going to be a bit more responsive.</p> <p><b>MO:</b> So you think they will give a bit more?</p> <p><b>Mary:</b> Yeah.</p>
4	9:23.3 - 14:48.6	<p><b>HOW DOES INTERACTION AFFECT PERFORMANCE?</b></p> <p><b>MO:</b> So...so...sort of moving on really to my second question which is how does interaction affect performance, so you sort of said that people give more than just the bare minimum if they've got this good interaction going on. Let's assume that we don't have good interaction, that we have someone who, as you said, just barks orders, what happens then?</p> <p><b>James:</b> Actually that kinda happened on our ship, when we were away on that deployment [looks to others for confirmation]. There was a big divide between the wardroom [officers] and the ratings [...] actually. I think the Captain decreed that the officers couldn't come ashore [socialise] with us. So we couldn't...wearas before on a small ship you could have a drink with them [...] obviously 'cos its a small ship. But we couldn't do that which in turn created a divide.</p>

**MO:** Oh, OK.

**James:** And it was quite an unpleasant place to work.

**Gary:** Unpleasant, unhealthy atmosphere on that deployment. [...]

**MO:** And how long was that?

**Gary:** 7 Months.

**MO:** 7 Months, right. OK. So how does that..obviously its unpleasant so ....what I am trying to get to here, I think we are all agreed erm....if there is good interaction, social interaction then its pleasant or if its unpleasant how does that affect performance do you think?

**Mary:** Well everybody's going to wrap their tits in [give up] you know? Like if a senior rate is barking orders all the time that person is going to be 'well, I can't be arsed with that.' like, you know. 'I'll just do the bare minimum.'

**Gary:** The original...erm...the divide was so great because of the lack of interaction and social activity. You're not getting to see the people above you letting their hair down and getting to know them on a social level. They just become ....uh, I don't know...the enemy so to speak. I mean you didn't really know the person individually did you? [turns to others].[All: No, nodding]

**Phil:** No...They weren't the enemy, like. [Laughter]...well maybe some of them...[Laughter]

**Gary:** I....I don't know if we took that, I think they took that off of us, first. They viewed us in a certain way rather than ....obviously we got that feeling from them. And err...it just carried on in that way and that way and that way. Obviously, I don't think a lot of them wanted that but if that's the way the Captain of the Ship wanted it then that's the way it's got to be done.

**Mary:** When you are away aswell on deployment, like, on such a small ship everything's heightened, you know what I mean? Its like a cooking pot [All: yeah, yeah and nodding] ..like, everything speeded up. Because you work and you're living with the same people all the time..yeah, I mean...so....

**MO:** So what's happening in the mess [living / recreation space] then during this time? You know what are the discussions that you're having in the mess, how do you feel about the situation, I guess you must talk about it amongst yourselves.

**James:** Basically you're sniping behind their back.

**Gary:** Yeah, basically. Talking behind their back with ...'He told me to do this..' and so on and so forth.[...]

**MO:** Is that a sort of relief then?

**Gary:** Yeah. I'm sure the sniping was also coming from the wardroom. Aswell you know.

**Mary:** A couple of them..you know..the lads are loosing respect for them..you know its getting a bit more uncomfortable...

**MO:** I can imagine.

**Gary** [...] an officer, if you've got a problem etc etc. You wouldn't dare [come to them], we wouldn't out there [on deployment] because you were scared that they would take that further up the line out of confidentiality and that's what...

**Phil:** I think that the only problem that caused on that trip was ...'cos of that divide aswell there was a lot of junior members of the wardroom that were missing out, talking to the senior rates or tapping into their knowledge and their resource [...] like passing knowledge, knowledge is passed down. Obviously if you're talking you're taking on his experiences. People have done that trip before..maybe five times before...and not, 'He's below me.' type thing, 'Nobody talk to him.' You're missing out on a big knowledge gap there. So I thought that was a big problem as well.

**MO:** Right thanks a lot , that's very good, thanks. So in terms of what you were doing on that deployment, what sort of things were you doing, without....I don't need the technical details.

**Mary:** I think 'cos the lads weren't scared to get out and let their hair down. I think that impacted because you weren't getting the socialising and like it was like all work and no play. And like..it was mainly the killicks [leading hands] that was getting the trouble because they were used to old school, you know going out and playing hard and working hard. You weren't getting that out there were you? [to Phil] [Phil: No] And I think that was a problem aswell weren't it? And any time you did have a drink or socialise you got...someone was on your shoulder straight away.

**MO:** OK, that doesn't sound too pleasant but...OK we'll just move on then.

5 14:48.6 -  
29:12.6

## **TOPIC 2 WHAT CONSTITUTES GOOD AND BAD INTERACTION**

### **POSITIVE EXAMPLES**

**MO:** Erm...my next topic is what constitutes good and bad interaction. So we've discussed how it affects performance but I want to see how...what's good and what's bad. Erm...so can you think back to an instance of positive interaction with a superior and just...er...maybe explain that incident and what seemed beneficial about it?

**Mary:** [To Phil] Well, we used to go training quite a lot didn't we? [Phil nods] You know to the gym and stuff. So that was....quite good weren't it?

**Phil:** Yeah....Just trying to think....of a work one [nervous laugh].

**MO:** It doesn't have to be a work one. I'm talking about interaction...obviously on the Ship but ...with each other but I'm talking about your superiors be they leading hands..or er...senior rates or officers. Interaction you've had with them and what you thought was beneficial about it.

**James:** A positive one for me was when I got a new boss, the DWEO [Deputy Weapon Engineering Officer] and every morning, possibly every couple of mornings he would say, 'Right, I want you to find out XYZ.' So as well as doing all my jobs for that day, I would have to try and find out this thing that he would want me to find out for the day. Which I did do, and it was increasing my knowledge. So that was

....positive interaction for me.

**MO:** Yeah. OK. Thanks very much. Anybody else got any other ones like that or completely different?

**Gary:** I think you see it on a daily basis from our Ops Room....[James: Supervisor] Yeah, I won't mention his name. He is just such a....what's the word? [Phil: Positive] Positive [...] that everything is you know...he's always imparting his knowledge on you..you know...Even if you're meant to be relaxing and chillin' out he's like...'Guys, see like this NBCD [Nuclear Chemical and Biological Damage] right..' but its 10 O'Clock at night! [laughter]. But you know...he's always imparting his knowledge and he'll always take time for every single person on board. From the chefs, to the officers...everyone and always imparting his knowledge[...] So he's always having a positive impact.Probably than everyone on board.

**James:** [...] and you always have bad days but this guy never has a bad day. He's always wanting to be positive. And there to help you.

**Gary:** Yeah, so that's a massive positive.

**MO:** OK, right. Anybody else? [Long Pause]. No? OK, let's go back to that guy, the ORS [Ops Room Supervisor] I think you said. Erm...how does....he's like that all the time you say? And you think thta's always a positive thing? [Gary: Yeah] That always makes you feel good about it.

**Phil:** You can always go to him, he'll always have the time of day for you. He's always cracking jokes, even in the corridor ..like...[...] just shouting stuff and that you know. Genuinely good lad and that.

**James:** If he asked me to do anything, I wouldn't care, I would drop everything and I would go and do it for him, straightaway. So it makes me ...I want to....wearas if I wasn't fond of the person and he asked me to do it or whatever, I would drag my heels a little bit. I mean I would do it eventually.

## **HOW DO YOU TRY TO INTERACT WITH YOUR SUBORDINATES POSITIVELY?**

**MO:** Right, thank you very much for that. And how do you try to interact with people yourselves? Er...I mean how would you do it? I know we've got two leading hands here, you've got obviously responsibilities as well but even for the other two, you obviously need to show people how to do things if they have just joined and that sort of thing, so could you give me an example of how you would do it.

**Phil:** Like to be honest, I look to Mary and he [...] if I am struggling with something then I go and see him. Normally he steps back and lets me get on with it and gives me a lot freedom...like to work? That brings me on quite a bit. Obviously if I'm stuck, he's always there to help me out, I think that's great.

**MO:** Do you think like...Mary said you went to the gym to train together aswell. Do you think that sort of thing helps as well?

**Phil:** Yeah. It definitely does. Its like with the dive thing [both are divers] We've always bonded in that way, so it does help.

**MO:** What do you think happens when you do sports and that sort of thing together?

**Phil:** When you do sport, it like clears your head a bit. Everyone likes training and to be fair ...like ...'cos the Ship's programme we go through periods where two times in the space of three weeks we might get to a gym. Its not really good enough to be fair.

**Mary:** I think its brilliant, 'cos like Phil and me, we lift weights and stuff like..If I am working out with Phil, I like trusting him. 'Cos if we are like...benching, he's got to take the bar off me and like we're encouraging ech other aswell. If I think he's like got another pull-up in him. I'm like, 'Do another one, you little shit'. You know what I mean [Laughter. Background: 'How lovely.'] Yeah, but it brings you closer like doesn't it? And like ..yeah...you can let off a bit of steam. Erm...yeah.

**MO:** Anybody else on that, Phys...sports?

**James:** I'd just...what you originally said...if you're trying to give a job to someone...the way I'd go about it...[...] At first I'm like, 'Mate, could you do that?' Wearas, if they took the piss I would...come down hard. But obviously....I wouldn't think anyone would do that...'cos they'd be in the shit.

**Mary:** Like...like..Phil was saying if I was bringing him up to how I think he should be for when he goes onto his next draft [posting /assignment]. Like I will speak to him as a normal person rather than barking and [...]. I like to be quite calm and like approachable so they can come speak to me whenever they want about anything.

**Phil:** Whereas the last LD [Leading Diver] tried to micro-manage everything. To be fair, he was quite useless himself so it didn't....you were just bouncing your head off the wall sometimes. So..you know...a job took twice as long because he tried to break down into such stupid detail. I'm pretty sure he once tried to explain to me how to wipe a cloth over an overhead. I [laughs] I've been an AB [Able Seaman] for nine years [laughter] I can clean a flat [deck space]..like.

**James:** [...] Obviously if he's not doing it right then you put your killick's [Leading Hand badges] on and whatever.

**MO:** Does everyone agree with that, would you go in informal to start with or would you prefer to go formal?

**Gary:** Depends. On what situation. I mean...er...yeah. Informal. But I know myself sometimes like during shakedown [training] er...I'll get a bit more formal then. Depends how much sleep I'm getting [laughter] [...] [laughter] But I'm not doing that job anymore...you know there's no reason to go round shouting at people.

**MO:** What happens do you think if you do go round shouting at people?

**Phil:** They're gonna go in their shell. Especially if you're fresh out of the box, you've just joined the Ship..you know, we've all been there. You're gonna be nervous and it's a big change to people, it's a totally different environment. And even like some of the lads you get who are quite smart struggle with some of the simpler tasks. So if you're giving them a hard time and you're on their case...they're gonna go into their

shell. And you're not going to get the best out of them.

**Mary:** I just think its bad leadership to go round barking all the time.

**MO:** Do you think...you said if someone is barking that is bad leadership. Do you think barking orders is an indication of bad leadership.

**Phil:** I think initially [...] 'Right I need you to do this, right now. If not you can stand-by'. kind of thing. You know...give them the chance, let them attempt it first.It is a style of bad leadership..you know...Mary will go, 'Phil, I need you to prep the SABA Set [Diving Set], I need it by dinner time.' Not a problem. If he comes back at half-one it's still not done. You know, 'Get your shit done, Phil.' If he has to tell me a third time and its still not done, then a bollocking is in order.

**Mary:** He might expect that like, but if I walk in and go, 'Right you little shit, get that done.'You know what I mean? Especially for ours 'cos it's life saving equipment, so its really important, you know.

**Phil:** If he gets a bit nervous and his concentration goes....he's gonna make a mistake. 'Cos its life saving equipment, you need to be switched on, focussed.

**Gary:** Its all down to your individual style of leadership. How you interpreted it on Leadership Course. The course itself is fine and it gives you the tools you need to use...

**Mary** [Interrupts] You borrow it more from other people though, don't you? More so than your Leadership Courses.

**Gary:** Yeah, yeah, yeah. Obviously when you join your first ship as a killick [Leading Hand] its all about how you do it personally. If you feel ...there's people who lead by fear..er...I've seen that quite a lot.

They're just makes them hated by the people who work for them. And it doesn't get the best out of them at all. It actually makes people....you know, if they don't understand their job, they're scared to even ask them that they didn't understand it. Because they'll be ridiculed for not understanding it. And so they'll crack on with the job and just worry, worry, worry constantly all day and then get bollocked for having it not done. And then you know, 'Why didn't you come and ask me? If you didn't know how to do it.' And then get ridiculed all over again. 'Cos it wasn't done, 'cos he didn't know how to do it. I've seen that and I don't, I don't ....

**Phil:** That's affected the cleverest of lads, it just makes them feel stupid and they'll be scared to seek advice and things.

**Gary:** And also er...if you see that, you can say to the person but it depends on whether they're gonna.....change or want to change. If they do think, 'that's how to do it, that's how I do it 'cos I that's the way to get the job done.' Tough and you know, it's not the way that they make it out to be.

**MO:** [To Mary]You said something quite interesting, you said it's about learning when you get on board, so you said after your leading hand's course or whatever you learn your style of leadership. Could you tell us a little bit more about that?

**Mary:** Yeah, I thnk it starts way before that, it starts when you first join up. You take like the good bit s and bad bits from like your superiors and then you kind of like almost create an image. You put your input

in. You like ...you know...if you've seen something that's really bad. You think, 'I'm never gonna do that.' or 'I'm never gonna be like that'. You like mould yourself before you even go on your leadership course. Leadership is like..is like..you get little tasks and it brings people.....out. So ....

**MO:** Yeah...OK. Agreement? Do you agree with that or....

James: Yeah, definitely.

**Phil:** You always remember the people that come up through over the years. You remember how they treated you..you know..I can't say ...say, a punishment or something and you might think that has a positive effect on you and you think, 'Yeah, I could use that in the future.' 'Cos it was..it was bad but [...] or, 'No, that was out of order.' sort of thing.

### **HOW DO YOU PREFER TO BE TREATED?**

**MO:** OK Thanks. And just to look at this from the other...sort of flip side, if you like, er..how would you prefer to be treated yourselves. So you've mentioned how you would deal with people and I think you've said that, on the whole, you ...using informal techniques, if you like, but be prepared to back it up with formality. Is that how you feel you would like to be treated or do you think it is different if you are talking to senior rates or officers or same rules apply?

**All:** Same rules apply.

**Gary:** It works all the same. [pause] You're always gonna come across all different styles of leadership so its how do you er...take that and how you react towards it.

**MO:** That's actually interesting point then, so how do you deal with different styles of leadership?

**Phil:** You just...It's part of your job isn't it? At the end of the day just do your job. You work with different people, you pick up different things. All the time you're learning, 'Yeah, I know he likes it done a certain way. He's going to expect it to be done by.... this.' You know, you pick up these things. You know who you can have a joke on with. Who...you know...keep it very formal. So even if it is kept formal, doesn't mean that person is ..bad to work for. It's his personality, it's his style. You learn through..talking to each other, informal communication again.

**MO:** Erm...OK. Anybody else on that? [Pause] No. OK.

6 29:12.6 -  
42:23.8

### **TOPIC 3 – FORMAL AND INFORMAL INTERACTION**

#### **WHEN IS IT APPROPRIATE TO USE INFORMAL INTERACTION?**

**MO:** Erm..right my third topic then [...] Yeah, my last one. Formal and informal interaction. We've just sort of discussed it a little bit erm...so I just wanted to start off by saying when is it appropriate to use informal

interaction.

**James:** When you're on your own. One on one with a subordinate but if they're other people around, officers for example or other senior rates. Not so much other senior rates on a small ship but erm...on a big ship[....]

**Gary:** As a general rule for myself talking to anybody else of a higher rank, I'll just use their rank because I don't know that person, could be a miserable...[laughter]. He could bollock you saying 'why did you call him by his first name?' I'd be like, 'Who are you?' But that's what you generally do. On a small ship, I believe you should all be formal, unless you are talking to like..the MEO [Marine Engineering Officer], which is..like, 'sir', or an officer but....even with some of the officers, they like to be informal but as long as you call them 'sir' in front of the XO [Executive Officer] or the Captain, then that's fine. But I think in general you would always call an officer 'sir' in front of the Captain anyway.

**Mary:** I...I call them by their work titles so like [interruption] yeah....so the only person I would call 'sir' on board is the skipper, anyone else is like 'Navs' [Navigating Officer], N2 [Deputy Navigating Officer]...

**Gary:** Well a lot of the time, you would call them 'Navs'...

**Mary:** But I don't call them 'sir' and 'ma'am' and all that and that's in front of anybody. [MO: OK] So that's kind of informal but formal [...]

**MO:** That's an interesting thing, so you are basically reserving the 'sir' bit for the Captain?

**James:** Yeah, 'cos when you are calling a 19 year old officer, 'sir' and I'm 29, you know what I mean?

**MO:** Yeah, absolutely. Anything else on that, would you go along with that? [To Phil] what sort of titles would you use?

**Phil:** I would go along with Mary, I've never liked purposely thought to talk to them like that, I've just sort of happened all the time...so I don't think I've thought about it, no. Yeah, I would go with using titles, I think its mixture of both to be honest.

## **SHOULD LEADERS MAINTAIN A DISTANCE BETWEEN THEMSELVES AND THEIR FOLLOWERS?**

**MO:** OK. Thanks very much. Do you think leaders should maintain a distance between themselves and the people they are leading?

**Phil:** I think it sometimes, yeah. It is good to talk but sometimes it needs to be done quickly [...] you know, you need that divide. Obviously between the Captain and the lads..you wouldn't expect to be pally-pally with the skipper I don't think.

**Gary:** I think its half the battle, you do have to socialise as we said earlier but ...on occasions..but yeah...there does have to be...[a divide]

**Mary:** I think it depends on your job role massively. If you're like the Swain [Coxswain] on a ship, you can't be out pissing up with junior rates all the time and then the next day trooping [disciplining] them or...[...] 'Cos its like, 'Well hang on a second.' So I think, you know, it



depends on your job role, your job title to how much interaction you have with people.

**Phil:** Like at the end of the day, you've still got to lead them people so you do need some separation so you can see they are that rank above.

**MO:** Gary, do you have anything to say about that?

**Gary:** I think its all down to respect ....really...I mean everyone knows there is a rank structure in the Royal Navy and you should respect the rank. That's how simple it is to me. I respect the rank above me by their rank but I might nnot respect the person [laughter].

**James:** I have met some people higher rank than me and there just [shrugs]...

**Gary:** That's what I'm saying the person you might not respect but at the end of the day you've gotta respect the rank. You know so for working purposes and military ethos etc. you've gotta respect....

## THE VALUE OF FORMAL INTERACTION

**MO:** OK, thanks very much. So just thinking about formal interaction now....erm....and I'm thinking about written orders and broadcasts so...daily orders for example, the shortcast [programme] , so you get broadcasts aswell...what the command aim is [All: yeah.] 'XYZ' or 'go and put the fire out in the main machinery space.' or whatever. They are formal orders. Right? So what do you think is the value of that sort of interaction?

**James:** Well you know what you have to do. If there's any come-backs, well that was what you were told to do. There it is there, daily orders are there.

**Phil:** Right place at the right time.

Mary: Communication isn't it? [...] so you get an order or you get some information [...]....

**MO:** OK.

**James:** If someone isn't there he can't go 'well, I didn't know.' The Command can come down and say,'Well, daily orders is there. So you're supposed to have read it. So you should have been there at that time.'

**MO:** Right. OK.[Pause]

**Gary:** Erm....Its a structure for working life, for daily life. [MO:yeah] in the Navy. Its a structure [...] its kinda definite, it's an order...its the rules, so you know what's happening and something for you to abide and obey by.

**Phil:** Helps you to manage manpower aswell, especially like on OST [Sea Training] and so forth. If you've got something specific like he's got to be up for gunnery drills and so forth. So if he's....like you're not gonna put him on the middle [middle watch: midnight to 4am] about 7 or 8 in the morning. You're gonna give him a better watch. Then again, it improves the, like, quality of life. So they're not gonna be tired and hanging out [tired] all the time.

**MO:** OK, thanks very much. What do you think about the reliability of

those sort of formal channels, say daily orders for example. In your experience how reliable are they?

**James:** Erm...it's difficult 'cos they're not worth the paper they're written on...[laughter].

**Phil:** It's difficult 'cos things change that quickly and that often. Yeah...you can't plan in for things breaking down or something like an external factor that moves times forward and back so I've got some sympathy for you there but then, saying that. A lot of the time, I think if people talked to themselves [each other] a lot better on the Ship, they could plan things better. And not do XO's [Executive Officer] rounds in the middle of maintenance periods. And not do like bring us starboard side to when they need to do like a RAS [Replenishment at Sea] capstan trial, so we're shifting boats around at the last minute. If people talk a bit more sometimes, they can plan things better.

**MO:** So you think it should be backed up by informal interaction as well?

**Phil:** Yeah, obviously you have things like weekly planners [meeting] and departmental meetings and so forth. But sometimes I think things get missed out of them, like the bigger picture. But a lot of times it's something you can't account for that also affect the programme so ...it goes both ways.

**James:** But [...] sometimes its just bad communication.

**Phil:** Yeah.

[Pause]

**Gary:** Its like the long-cast, short-cast, daily orders, is erm....that's you're orders, that's what's happening but remain flexible. I mean, the amount of times you've heard that which means? [shrugs][pause]. You know what I mean?

**Phil:** I mean ...so many breakdowns [...] it's going to happen.

**James:** It's all like....

**Gary:** It's all changed now, you used to get your 6 months shortcast, you pretty much booked a holiday without insurance, bang it in. But you've got no chance now. So that's the extent of flexibility, it's went from that to [mimes bendy arms].

**MO:** OK, so I'm just trying to think. If you read daily orders or the shortcast and you don't have any real faith in it what effect do you think that has on A. you as an individual but also as a Ship as a whole.

**Phil:** It's just planning you life, it has a big effect on ...[Gary: morale] morale. And your family aswell it will effect. Things like he just said you book a holiday with your family. Your wife, girlfriend etc.is going to be you know...excited. You get close to the time. 'Oh sorry, we've been called away, on task for this.' Its gonna cause more strain for that person back at home.

**MO:** That's something that's happening more recently, you think?

**Gary:** Absolutely, yeah. If you ask all the people who have got their notice in, 9..8 or 9 out of 10 of them will say 'I want to plan my life.' it's the biggest one, I always hear.

## CO'S AIMS AND OBJECTIVES

**MO:** OK, right OK. Let's see where I am here. OK, so how are you made aware of the CO's [Commanding Officer] aims and objectives?

**Phil:** You've got CTMs [Captain's Temporary Memoranda] and so forth. When something's happening, what he wants to achieve. Our Captain does a lot of Ship's addresses, clear lower decks [gather whole ship's company], you get what's happening, what he wants to achieve.

**Gary:** Its on daily orders as well. CO's aims and objectives. And it changes accordingly.

**MO:** Is that useful, you just mentioned Captain's addresses, when he talks to everybody.

**Phil:** It's useful up to a point but again, there's stuff you can't account for with the programme, you just.....yeah...it's hard, like. And like we were saying...like, just recently you can't plan nothing, especially the last two or three years. I know that's 'cos we haven't got enough ships to cover. You know the Ship's got more responsibilities now, so there's not enough scope to do things like [...]. You're constantly on the go, like.

**MO:** Is this quite a big thing that you all feel at the moment or...

**Phil:** Massive, yeah.

**Gary:** Sometimes we don't know if we're actually being told the truth. [nodding, yeah.] 'Cos I've heard a lot of people walk away from the Captain's addresses thinking 'Fuck, I've heard that one before.' And it just seems ....

**James:** Too hunky-dory.

**Gary:** Yeah. To actually go and happen. And some of them talk in a round-about way. Like a politician. I dinnae like it.

**MO:** Why do you think they do that?

**Gary:** To keep morale up, you know. To not just hit you with the bad and awful truth of how shit family life is going to be [laughter]. I mean a politician will sit in the House of Lords and sit on the television that we'll expand and do whatever and they're just making things a bit more easy for you to swallow.

**MO:** So what would you prefer, would you prefer if the Captain was going to address you on the programme for the next 6 months, that he was just honest, brutally honest...

All: yeah, yeah.

**Gary:** Far more respect, that way. 'Cos then everybody would know exactly what's happening, boom, boom, boom [bangs fist on table in time with 'booms']. Instead of 'Oh, by the way, lah, lah lah.' Instead of all this jumping around, just go 'Bang, bang, bang, there it is, guys.'

**Phil:** Especially as these programmes just repeat themselves anyway. You can write our Ship's programme without us....doing it. You know you're going to do an OST [Operational Sea Training], you know you're going to do a JMC [NATO exercise], you know going to do [certain] operations. You're going to have your maintenance period here and there ...

		<p><b>Gary:</b> Several deployments.</p> <p><b>Phil:</b> Several deployments. Its a 12 months turnaround and then you're going to be doing the same thing again. But ...just let people know. Its like those 5 weeks maintenance period, you've got to go away to do this or ship's visits and you haven't been told, so its short notice. It gets all mixed around that way.</p> <p><b>James:</b> I think it creates rumours as well. Like 2 deck rumours..like you hear some freaky things on 2 deck and you're like 'Yeah.' I think that as well whereas if there is better communication, then you'll get less rumours. Some of them turn out to be true.</p> <p><b>Mary:</b> I like the 2 deck rumours. [laughter]</p> <p><b>MO:</b> You quite enjoy generating the odd buzz [rumour]?</p> <p><b>Mary:</b> States trip. [laughter]</p> <p><b>James:</b> We're going to Florida [laughter].</p> <p><b>Phil:</b> See how fast it get back, eh? [to the Ship].[laughter]</p> <p><b>MO:</b> That would be a very interesting research topic all its own. [Laughter]. Thanks very much for that,just coming to the end of it now.</p>
7	42:00.2 - 50:36.4	<p><b>HOW CAN LEADERS REDUCE THE DISTANCE BETWEEN THEM AND THEIR FOLLOWERS?</b></p> <p><b>MO:</b> So this is my last question, I am just going to check the time on there...doing pretty well. So this is my last question on this last topic. And then I just have some finalising questions really, so...So we've spoken about distance and maintaining distance, so to flip that on the other side: how can leaders reduce the distance, what's the best way of reducing that distance?</p> <p><b>James:</b> Between the subordinates?</p> <p><b>MO:</b> Between themselves and the followers, yeah, sorry I should have explained that.</p> <p><b>Phil:</b> I think its AT [Adventure Training] again, you know. When you do have important situations, just get amongst the lads and talk to them. Get a bit of feedback of them, tell them what you want to know, like. You know when you talk to each other you get a better understanding.</p> <p><b>Gary:</b> What I was going to say is the lack of Divisional Meetings I think...I mean..when do they happen? Once a year?</p> <p><b>James:</b> They did Divisional Runs Ashore [social events] didn't they? Although....there's 3 [people] in my division! [laughter].</p> <p><b>Gary:</b> But I think, maybe, departmental...er...bonding. There's very little of it. Even monthly talks, like....maybe the diving department would go off or maybe the WE [weapon engineering] department would get together once a month and go 'Right, guys. What's happened this month is ...that's pissed you off...made you happy..blah,blah, blah.' You get none of that. And then you can go 'Right, that's made me...that's pissed me off. Blah,blah,blah.' And they've got something they can take somewhere and then ....and then it all ends up with the Captain, so he can structure it all out, which they like to do. And he can find a way of balancing it.</p>

**Phil:** This lot are pretty good aren't they?

**Mary:** Yeah, like we do have like department run ashores and we've got like a fund for that where you like pay in. And we're in like clubs....going snowboarding and skiing. So we do quite a bit in our branch [diving] don't we? [to Phil] But then you get a bit of the other branches thinking we're cliquey and that [sniggering] but its just what we do [laughter].

**Gary:** Just 'cos we don't gel our hair or shave our chest. [laughter] Or should I say wax? [laughter]  
[pause]

**MO:** Anything else?

**James:** In my department, from my experience the Divisional System is non-existant. I've never had an interview with my DO [Divisional Officer] and I've been on board for 2 years. So with the old WEO [Weapon Engineering Officer].....

**Gary:** I think that's what's missing, it really is.'Cos all your getting is the Captain's talks now and again and you're not getting anything from your individual DO [Divisional Officer] or your individual Senior Rate. And the only thing you're getting between the Captain's talks now and again is your Both Watches [daily muster].

**James:** So you're getting....

**Gary:** A big gap....Which should be filled, you know. For you to communicate, you know...upwards? People are like 'Use the divisional system.' But its all ....its just a drip [complaint] to the Killick [leading hand] who drips to the PO [Petty Officer] who'll.....[pause].....who'll hit a brick wall. [laughter]. He'll be 'Whoa, don't come to me with a problem, I'm trying to get my Chiefs up [get promotion].' But quite a lot it just hits brick walss, so there's no constructive departmental stuff run on board. That..that means anything serious. I mean how many times have you heard the lads saying, 'Oh, what's the point in saying anything about it.' 'Cos nothing'll get done.

**James:** I actually seen something this morning. Erm...there's a girl on board that ..er...she's put her notice in. And she's really quite a clever girl and that. And really she's the kinda girl the Navy doesn't wannae loose, basically. And her old DO, the Navigating Officer, who's left now, basically hadn't bothered his arse. Er...she had been trying to branch transfer and he's done nothing to help her and he's away now. And er...that guy we were talking about earlier? The guy who's positive all the time? I've heard he's been trying to...he's inquired about getting her a branch transfer and all that. And that's....and that....I know he is her Senior Rate and all that but I think the Divisional Officer should have done a lot better But we've got a new Navigating Officer on board [...] so hopefully he'll be a successful one...

**Gary:** See that's the problem there. And I think it's quite appropriate. I was the Div Leading Hand and I spoke to my Divisional Officer about it. His exact words, 'Well, if she's not going to be working for us...I ain't gonna be working for her.' And that was his exact words. And that's why I brought that up straight away. 'Cos I'm seeing stuff like that. But that...thats...you know...I don't know why he was like that.

**MO:** Is there anything? Once you've hit that brick wall. I mean you've actually gone and spoken to the officer. Erm....Is there anything else you can do after that?

**James:** I say the XO [Executive Officer] but if he does nothing, go above his head. That's what I would do.

**Gary:** Are you saying in this case, or in general?

**MO:** Just in general, yeah. If there is an issue and you're getting nowhere.

**Gary:** I know there's a procedure after the Captain. Er...I don't know if anyone else...but personally I wouldn't approach my Captain with any problems. I am quite sure...

**Phil:** I wouldn't even approach an officer to be quite honest.

**Gary:** Problem was...there was such a great divide ...trust...none of us trust approaching any of them 'cos .....I don't know...fear of the Captain maybe...

**James:** Maybe that'I I change 'cos there's a big turnover. The XO, the Captain...new YOs [Young Officers].

**Gary:** Generally, it should all just come together and work together but I think there's a big divide definitely...a big structural [...] really, divisional structure.

**Phil:** The only way I can explain it is erm...where they judge the needs of one person more than the needs of the service [Royal Navy]. Maybe an officer judges the needs of the service more than a person. Maybe that's right but a lot of times it's not. Especially if you've got family like...back home. Sometimes it's not...like a couple of occasions on board in the past maybe year or two? [to others] I've been on board. You know, I've seen some people...they couldn't get home...you know, they couldn't work round it to help them out 'cos they deemed that perhaps they were needed it was more important but he's got a problem back home that really needs his attention. Sometimes I don't think that's right.Erm...you might view it that it's right, officer's having that mentality. I've seen it on a big ship where it's like a families day, an officer's wife broke her ankle and she's off to hospital but he'd rather stay on the Ship. [...] I've seen it ....like...I've seen it over 9 years.

**James:** This might not be relevant but I've noticed it a couple of times things like that happening. Things like family dying back home and going to the skipper [Captain] and saying 'I've got to get back home, So-and-so's died.' And it's been like 'Oh, no.' And people have had to contact Family Services is it?

**Gary:** Yeah.

**James:** It was like the.... [All: YO [Young Officer]] ....He had that wedding to go to...

**Gary:** He went back for a wedding...

**James:** For a week ...you know what I mean?...people couldn't get back home

**Gary:** Can you imagine ...people down the junior rates [accommodation] will be like 'What's going on?' Can't get home for grievances purposes but he goes for a...wedding.

		<p>[...]</p> <p><b>MO:</b> Its very interesting and very important that you brought it up, I think.</p> <p><b>Gary:</b> The Navy as a whole though, they don't look after [...] and it's meant to be an A+ Cat [category] priority of the First Sea Lord and it doesn't seem to be working.</p> <p><b>Phil:</b> They're quoting manpower and all that but I think its something that, like I say, that [...] its like a mistrust like, I go to Mary and he goes 'Yeah, mate, you've got problems.' and then he'll go to sort them out Maybe if I went to a DO or higher, they're likely to go, 'No, we need to get this route surveying done this week, we can't spare you.'</p> <p>Sometimes its right, a lot of times it's not.</p> <p><b>MO:</b> OK. Would you go along with that? [to Mary]</p> <p><b>Mary:</b> Yeah. I would agree with that.</p> <p><b>Gary:</b> I am not sure we are talking about leadership [laughter].</p> <p><b>MO:</b> It's all part of the picture isn't it? [All: Yeah, yeah] Its a very wide ....its how....its how people are treated is what we are talking about and that's a part of leadership. Its partly how you treat people, so I am very interested in that. Erm...unless you have anything else to say on that I am going to move on to the final questions. Unless anybody has anything else they want me to know about.</p>
8	51:58.0 - 57:26.6	<p><b>ENDING QUESTIONS</b></p> <p><b>WHAT ADVICE WOULD YOU GIVE TO A JUNIOR COMMAND TEAM?</b></p> <p><b>MO:</b> OK, so these are just some ending questions. [Pause. Nods] So my first one ...there are three...the first one is: If you were...let's say you'd been selected to join Sea Training, the four of you, er....as a part of a team that was going to go on board and train a junior command team ...so junior officers...things like that in leadership. They thought perhaps it would be a godd idea to get the perspective of some junior rates on this. So, if that happened, what advice would you give those officers on how to interact with their crew?</p> <p><b>Phil:</b> Don't be scared to tap into their [junior rates] knowledge and experiences. Like on an OST [Operational Sea Training] or a JMC [Joint Maritime Course - NATO exercise] ask them, 'What was the ship like at the time? What was it like?' Even get them to update you on runs ashore [ports] and stuff. You know, ask them, 'Oh, is this a good place to go?' Next time they'll get the most out of them [the junior rates] if they go there. You'll get them talking then, the lads, at the same time.</p> <p><b>James:</b> Get involved. 'Cos we had two YOs [young officers] on before and they were fantastic. Like in a fire exercise they were like 'How about I go attack BA? [man equipped with breathing apparatus to tackle fire] ' They wanted to get involved and they were and they were donning their EDBAs [Endurance Breathing Apparatus]. It was good experience and good knowledge for them. So they two guys were</p>

fantastic. Whereas the last guys we had were 'No, we're officers, we're not doing that.' D'ya know what I mean? They were standing...they were standing on the jetty conducting things.

**Gary:** But they don't have the knowledge to conduct things....they've never been there....

**James:** So get involved so when it is your turn to conduct things on the jetty, you know what's going on. You've been there, done it.

**MO:** Yeah? OK. Thanks very much.

**Phil:** If he's telling you what to do, he should have an idea what that is. [Pause]

**MO:** Yeah, I was going to going to go around the table for this one, so Mary...

**Mary:** I'd just...I would say to them don't go up yourselves [have an inflated opinion of one's self]. Just because you've got an education..you have...like....you're really smart on paper but life skill, you know, you might not be so good at. So don't have this image that you think you are better than everyone else...you know....that's what I'd say.

**Gary:** It seems to me a bit of a...a bit of a ...class system going on. Not...not with everybody. But there are certain officers that will come in and er....and they don't wanna listen to you, because they think that whatever you're telling them ..they...they know better immediately because they deem themselves smarter you know...and maybe....you know.And maybe, sorry I'm just talking to someone with a ...*staunch* accent [...] they'll view that as a bit...common, you know, and then disregard them ..you know what I mean? And the thing that you were talking about, with the YOs thinking they were up themselves? Unfortunately, that was because of this Captain.

**James:** Yes it was.

**Gary:** Because *he* created a divide. He said 'You aren't officers.' He was meant to come down [...] There was no stewards on board or something and the YOs were told not to wash the dishes and the Duty Watch had to wash the YO's dishes. You know its not teaching them anything. So the way the Captain treated the YOs as they came in you know....Already you are there [indicates with hand held high] made them believe 'We are up here.'

**James:** There should be a hazing process for a want of a better word, do you know what I mean? Because they've come in and they're officers but he's [Phil] been in 9 years so he knows more than them. It doesn't matter that they're officers, you know what I mean? Take a bit of advice if you can...

**Gary:** There is lots of them..they do it. {James: yeah, yeah.} They do take advice, you know. Its not all one-sided here....

**Phil:** The proof of ...the proof of it working here is the 2 people on board are now the Navigating Officer and the Gunnery Officer on a ship together. The certain one we were talking bout who came and had the total wrong attitude now he's failed his exams and he's in a world of trouble.

**James:** I think it was like 6 months and he didn't pass his [...] exams [....].



		<p><b>Mary:</b> I think its all about leading by example. You know if you are doing a particularly unpleasant job and you're just sitting in the mess brewing up [making / drinking tea] how can you expect your lads to do anything ...you got to get up and do it yourself. If there's like an officer...giving like...an AB [Able Seaman] jobs all the time and they're not doing it themselves. You're gonna have problems. They're not willing to er...roll up their sleeves and take their cufflinks off and get in there.</p> <p><b>MO:</b> [Looks pointedly at own cufflinks and hides them under table][laughter]</p> <p><b>Gary:</b> No pun intended.[laughter]</p> <p><b>MO:</b> Thanks very much [laughter]</p> <p><b>Gary:</b> You've seen that yourself? That there's a class system there.</p> <p><b>MO:</b> Yeah, I've seen that. I've been in the Navy for 23 years now so I've seen that. I've seen people go in with those sorts of attitudes and I've seen lots of officers roll up their sleeves and get on with it. I've seen Captains in their ovvies [overalls] scrubbing out [cleaning] on 2 deck and I think I know what effect that has but I just wanted to come and ask you guys really erm...otherwise it will just end up being my view of leadership and how leadership is according to Matt which would probably be just as bad. So that is why I come and ask you. Erm...</p>
9	57:26.6 - 59:41.6	<p><b>SUMMARY</b></p> <p><b>MO:</b> Right so I was just going to summarise now then...quickly...erm...We spoke about interaction and whether.... and how you think about interaction. You mentioned delegation ...er....subordinate development erm...and I think getting involved. You mentioned sport, AT that sort of thing. Erm...and when I asked you how you thought it affected performance, you thought interaction was necessary even vital ...erm...am I taking it too far or....</p> <p><b>Phil:</b> No, it is, yeah.</p> <p><b>MO:</b> Erm...but positively for performance it had an effect and you think that if someone doesn't interact very well and they bark orders, to quote you Mary, they won't give a 100%, they just give the bare minimum. You gave me some instances of positive interaction and you mentioned one guy in particular who was very positive, you said. Erm...when is it appropriate to use informal and formal interaction? One on ones, I think you said, informal and generally quite a lot on small ships but there were instances when formality was more appropriate, with the CO for instance. Erm...you told me about daily orders, you told me they were useful but not often ....maybe I'm taking it too far...but sometimes unreliable erm....Aims and objectives. We talked about reducing the distance and you've spoken quite a lot about involvement, getting involved ....and also we were talking about advising junior officers. What you mentioned [to James] getting involved in fire-fighting activities and that sort of thing so...getting involved and not having this distance...we spoke about distance quite a lot [yeah, yeah]. Er....and that divide that you metioned. Erm...so</p>

		<p>that's what I got from it. Obviously I get a lot more from the recording but am I ...is that roughly..quite a good ..have I missed anything there important? [long pause]</p> <p><b>Phil:</b> Er....no.</p> <p><b>MO:</b> I will obviously...I will have to transcribe the thing so I will ...I'll be all over it but er...OK.</p>
1 0	59:41.5 - 1:03:22.2	<p><b>HAVE I MISSED ANYTHING?</b></p> <p><b>MO:</b> OK well really. As I said, this is my first project, I am going to do 3 projects. My next projects I am going to look at social networks and er...on ships. I am going to be doing that on sea training, so you might see me again. I'll be coming down and asking you whether you would go to this person for advice and I'll draw like a social diagram of how you all interact on the Ship and then compare that with how a ship performs on sea training. Erm...so this is my first one and so I am quite early on in my research so I'm just wondering if any of you think I've missed anything important? Or do you think there is something I should be looking at?</p> <p><b>Gary:</b> I think you need to imply [include] the team-work including everyone...again...and again...and again.</p> <p><b>Mary:</b> I think we should bring back old school like..</p> <p><b>Gary:</b> Bring back old school.</p> <p><b>Mary:</b> Where we had that work hard, play hard thing.</p> <p><b>Gary:</b> Yeah, I'm all for that. Now, if you play hard, you're outside [dismissed from the Service].</p> <p><b>Mary:</b> Now its like squeeze them, as hard as you can. Get as much work out of them as you can. You've got to get a balance.</p> <p><b>Gary:</b> And there needs to be more credit given to individuals at the lowest levels. All the way up actually, there should be more credit. A lot of people do good work. Never feel as though they get recognised for it. And then they end up turning around and saying,'You know what? Why even bother?' Then throw a tantrum...but they'll get noticed for that. [laughter]</p> <p><b>Mary:</b> You're lot got like that last night didn't they? [laughter]</p> <p><b>Gary:</b> That wasn't me! [loud laughter]. Actually it was the sort of thing [laughter] I've had a few tantrums [laughter] [...] [laughter] I can exorcise my demons. [laughter].</p> <p><b>MO:</b> Everybody's got them.</p> <p><b>Gary:</b> No, I think everybody's got to start believing the team actually works 'cos at the moment....ergh....I dunno ..it just seems a bit...</p> <p><b>James:</b> Misguided....</p> <p><b>Gary:</b> Yeah, yeah....we're looking up top...you know...for the leadership and...at the moment we're kinda looking at ourselves and the middle level 'cos we don't trust in the leadership...they involve themselves the whole time instead of as a whole team expecting us...</p> <p><b>James:</b> to get involved [...] by barking orders ...</p> <p><b>Gary:</b> So teamwork is a massive thing. Of course it is, its the Navy's motto.</p> <p><b>Mary:</b> I seriously think like: bring it back. Work hard, play hard.</p>

**Gary:** Well that's a lot of the reason its gone isn't it? [yeah, yeah] 'Cos work hard, play hard. All the messes get together work hard, play hard. You know, if you mess up you're gonna get trooped [disciplined] by the Coxswain or you've just been out on the piss with him the night before but you know that...and...yeah, Mary's right I think. I think much more socialised events and less focus on...the people in the crew erm...you know...'Yeah, this guys gonna mess up'. You've also got people walking around ...looking for a problem..as well. Either thats to get them Brownie Points ...or its....and its getting like everyone's getting split apart ...in...in..general. There's no ...much bonding...anymore....

**MO:** OK, right. Anybody else? Well thank you very much for that. I'll just stop it there.

## INTERACT FOCUS GROUP S1 – TRANSCRIPT

DATE 8 May 2012

VENUE Senior Rates' Mess RN Mine Counter-Measures Vessel

### PARTICIPANTS

Name	Gender	Age	Consent
Sean	M	36	√
Gav	M	40	√
Iain	M	42	√
Chuck	M	34	√
Simon	M	37	√
Bunny	M	46	√
Dave	M	44	√

0:00.0 - 4:05.2

### OPENING QUESTIONS

#### INTERACTION – FIRST THOUGHTS

**MO:** OK, so introductory question then, nice open question...er...What is the first thing that comes into your mind when you think about interaction with leaders and followers?

**Sean:** Leading by example?

**MO:** OK. Yuh. As in..good examples? bad examples?

**Sean:** Good examples...it doesn't always happen though does it?

**MO:** No it doesn't...erm..When does it...you don't have to give me specifics but can you give me an example of when it doesn't happen?

**Sean:** Er...I'll give you an example, MASC [material and sea readiness check] last ..the Boss and some of the officers would be in bed while the others were cleaning. It's everyone's responsibility to get the Ship up to a certain standard.

**MO:** Uh-huh....anyone got anything else on that?

**Gav:** I think a lot of the time there's as many bad examples of leadership in the RN as there are good examples unfortunately.

That's [...] from the wardroom [officers' mess] the senior rates....

Iain: In the junior rates mess there can be a lot of bad examples set unfortunately, by leading hands who the lads look to if anything *more* to than the senior rates because [...] [yeah...agreement from

the group] that's an issue to what I have seen over the last couple of years.

**MO:** OK and what effect do you think that has?

**Gav:** I think when the ABs [able seamen] see the way some of the leading hands act its almost 'ah...that's fine..that's the way to act.'

**Sean:** [Interrupts] That makes it right.

**Iain:** Yeah, yeah. They are obviously the more day to day or hour to hour contact. And you see some the examples they set. They're like 'well if that's how he's going to work'. And he's a leading hand, still potentially getting promotion to senior rate ..its acceptable.

**Gav:** He can act like that so I know when I get my leading hands, I can act like that and still get my next promotion anyway.

**MO:** Get away with it?

**Gav:** Definitely.

**MO:** OK. What can you guys do, the senior rates about that?

**Iain:** [Laughs, blows out mouth] I suppose at the end of the day..its easy to sit here and say that now oh we're senior rates, we should be picking up [correcting] the leading hands and to a certain extent we should be but we're senior rates, we've got our own jobs to be doing ...we're not necessarily working ..a lot of the time we are sitting in front of a ...computer, for want of a better word...especially nowadays, we do spend a lot of time, in front of a laptop...in front of NavyStar [RN computer system] so its the killicks [leadig hands] who are the day to day. I think..possibly senior rates and officers should be pulling back from the computer a wee bit or as much as possible and saying 'Right I need to be getting around the Ship , I need to be working with the department, you know rather than just [...]

**Chuck:** [...] 'cos people are people aren't they?

**MO:** Yeah.

**Chuck:** Regardless..erm...if someone's like that, they've got a tendency to er...I don't know be disruptive. He's gonna be disruptive. It doesn't matter as a senior rate you're probably gonna manage that to a certain degree but I think you can't change someone if he's intent on being or he's just despondent with the RN and er...very difficult one to er..to change that ....Just...just about you setting a good example and not...you know... whatever you have any exposure to the younger members that you're influential and they see you as ..you know...the better standard. You will get individuals...[to Iain]..sorry..

**Iain:** If you're sat in the mess or you're not present when this bad example is being set, you can't really do anything about it..you can't be everywhere at once.

**MO:** Yeah..OK right. I might mention your names a few times so if I say 'thanks Iain' I'm not being condescending if its when I'm typing [Laughs]. Right is everyone in agreement with that? Has anybody

got anything they want to add to that?

4:06.3 - 7:29.4

## TOPIC 1 HOW DOES INTERACTION AFFECT PERFORMANCE

### DOES INTERACTION AFFECT PERFORMANCE?

**MO:** So my first topic then is how does interaction affect performance and my first question there is do you think interaction does affect performance?

**Gav:** Yeah..I'd say...yeah...If you have an officer, a senior rate erm....taking the time to be involved in some [...] It may very well be a junior rate's level of task but if somebody's joining in , saying 'look', you know what I mean? 'I'm happy to help you, I've got a spare half an hour, 45 minutes. Talk me through what you're doing. I'm more than happy to help you.' It could be something simple..you know...Coming alongside [entering harbour and securing to the jetty]...there's 10 officers on the bridge and 6 of them are looking out of the window for want of a better word. Would it be that much...pain in the arse for them just to say 'You know what? I'll go down and help out back aft...I'll go on the fo'csle [upper deck work areas]. I'll chuck a rope or deal with the fenders' stuff like that. I'm not saying every time but once in a blue moon...you know. And then the lads are saying 'You know what? That's quite good.'

Simon: That's what used to happen [background: yeah, yeah] Especially your YOs [young officers]. They would be working part of ship [upper deck work areas] and yeah [background: yeah, yeah] and I did appreciate that and actually, they understand more where the lads are coming from when you're like 'down slack on that back-spring' [heave in on a certain rope] well actually...they should..when they get promoted as well ..the officers...because actually we've only got one capstan here [winch for heaving the rope in with]..you know what I mean and ..and like you say...Gav said...you know...its the understanding of what the guys are going through. [Background: yeah, agreement, nodding].

**MO:** So that doesn't happen anymore? Where you have officers on parts of ship?

**Iain:** I would say very rarely.

**Simon:** Not for a long time.

**Sean:** It didn't happen. I was the Boatswain for a year and a half and it didn't happen once. And then you [Simon] took over from me in [...] three years and it hasn't happened.

**Gav:** The Bridge side of things ..I'm not stretching it to say they are literally looking out of the window. I mean you've obviously got your main Officer of the Watch , one on WECDIS [navigation system].

	<p>Apart fae that a lot of the time its [twiddles thumbs, looks at ceiling] 'are we alongside yet?' And you're just thinking 'Grow up!' I mean not being funny but especially when we have been short [of manpower] over the last couple of months. That..that to me is big thing, seeing somebody who wouldn't necessarily be involved take that once every three coming alongsides [entering harbour] or whatever 'Oh. I'm away down to help'. That would make a difference as far as I am concerned.</p> <p><b>MO:</b> OK, so that's quite a big...strong one that you're saying there,</p> <p><b>Gav.</b> Are you all in agreement?</p> <p><b>All:</b> Yeah, yeah.</p> <p><b>MO:</b> OK. I didn't realise that officers didn't do part of ship that often because it was always..</p> <p><b>Chuck:</b> I don't know because I've only just joined but maybe its the command side of it...maybe the Navigator's taking charge of the N2 [Navigator's assistant] he just wants to...</p> <p><b>Simon:</b> It's not a big part..no.</p> <p><b>Chuck</b> [...][Ship's Broadcast announcement interrupts]</p> <p><b>Sean:</b> [...]They don't get involved in part of ship not when you are just skipping [...] they don't go part of ship, WE [weapon engineering], ME [marine engineering] etc etc. They don't do any of that anymore, do they? [agreement]</p>
7:29.4 - 8:16.9	<p><b>HOW DOES INTERACTION AFFECT PERFORMANCE?</b></p> <p><b>MO:</b> So I think you are all agreed that it does affect performance, so my next question is how does interaction affect performance? Having interaction or not having interaction, what is the effect?</p> <p><b>Sean:</b> I think having good interaction makes a good bond? [agreement, nodding, yeah, yeah] which is a good working relationship then and that's supportive then, you just get better and better together.</p> <p><b>Simon:</b> And it's the opposite, if you don't get interaction, you don't get a bond.</p> <p><b>Gav:</b> That's exactly it. If there's no interaction then the junior rates ...it's almost...it's not one Ship's Company. Right we've got a junior rates mess down here, we've got a senior rates mess here and we've got a wardroom upstairs. Its almost 3 separate entities.</p> <p><b>MO:</b> That's very interesting thanks, I appreciate that. Erm...OK has anybody else got anything to say on that? That is my first topic. So before we move on to another topic. Has anybody got anything to say about how it affects performance? [pause]</p>
8:14.8 - 25:01.0	<p><b>TOPIC 2 WHAT CONSTITUTES GOOD AND BAD</b></p>

## INTERACTION

### POSITIVE EXAMPLES

**MO:** OK well my second topic, then, is..what constitutes good or bad interaction? And my first question is, without giving specific details, can you think back to an incident of positive interaction with a superior and what made it seem beneficial? Just give some examples but without giving the names of ships and so on.

**Gav:** I think a couple that I have seen is erm...its always pre-OST [Operational Sea Training] you know...scrubbing out. I've seen officers on deck, you know, just bimbly about.[...]And the next minute the Captain's out in his ovies [overalls] and starts scrubbing out, basically. And then all the officers are like that, 'Oh' [looks around] [laughter]. And then right away they've gone and got changed into ovies. And well if the lads...see that then they say 'well' and they're taking part as well its not just us and them.

**Simon:** But the junior rates have got to realise, you know, it can't happen all the time. Like Chuck says. you are in front of a computer. [...] You know, I mean I have'nt been a PO [Petty Officer] for long and I always thought that..that people should help more but then [...]when you get to this stage, your life's ...you've got your own stuff to do and its nice if you can do that..however, you know this is what we are here to do.

**MO:** OK, thanks for that, its Simon isn't it?

**Simon:** Yeah.

**MO:** OK, Has anybody got anything to add to that?

**Simon:** The one I've seen before is with large fenders, throwing them over the side, you know on part of ship and seeing two lads struggling. You know what I mean, me and [...] we've gone and thrown the fender out instead of going 'get a move on', you know what I mean? I think the lads appreciate that, especially you know? Instead of just watching them struggle.

**Sean:** Some people can't lift those fenders. I've been on ships before and you might have two females well females can't lift those fenders and I've had males who can't lift themselves because they're weaker.

**MO:** So you think you should pitch in?

**Gav:** A lot of the time that is what it comes down to..pitching in..you know..I mean, it does...it does make so much a difference.

**Iain:** [...] once in a blue moon...everybody's there you know what I mean? No matter what it is, scrubbing out [cleaning], parts of ship...

**Gav:** [interrupts] It's nice to see [...]

**Iain:** Yeah.

**Sean:** It's a bit of planning a bit of understanding of what it takes to



achieve it. That what it is isn't it?

**Chuck:** 'Cos it starts at the top and works down as erm...said over there. But I think....its programme dependent as well, depending on what it is as I say...as Simon said it's nice to come out and dig out [work] with the lads but if you're getting an inspection and its the week before then the lads should understand they don't expect to see you. You've got a lot of work on. It is hard...getting...I've been on [board] for a couple of weeks, I find it hard to get away from that computer. Once you're on it, you just keep finding more and more things to delve into. It is difficult..finding that balance.

**MO:** OK. Right, anything else on that? [pause] Can anybody think of er..you've given some good interactions, can anyone think of some bad interactions you've had in the past?

**Sean:** I've got one for you. And say exactly who it was. Last year over in the Gulf there was ..ah....[...] every ship had to provide people to do sports [...]. So...nobody wanted to go from any of the messes and we got told: we are supplying so many people, so it was like a direct order. So me and you [Simon] went didn't we?

**Simon:** Uh-huh.

**Sean:** About 4 officers went I think about 8 junior rates went. When we got there within 15 minutes all the officers went. So it was a .....we stayed didn't we?

**Simon:** Yeah.

**Sean:** We lead by example but it didn't come from the officers, they went.

**MO:** Right, OK.

**Sean:** [...]

**MO:** And what effect do you think that had?

**Sean:** They don't respect them then.

**MO:** OK [pause] And do you think that kind of scenario where you doing sports, say, that loss of respect. You think that carries on into the workplace?

**Sean:** Definitely.

**Simon:** Yeah, it does ...it does.

## **HOW DO YOU TRY TO INTERACT WITH YOUR SUBORDINATES POSITIVELY?**

**MO:** Right, good. OK I'll move onto..sorry...the next question. Erm...and that is: how do you try to interact with your subordinates. How do you personally try to do it?

**Gav:** Myself and Iain, we've only got one lad who works for us. He's a good lad. It's more a case of between us ..sloping [passing on responsibility] for want of a better word. [laughter] Its case of...'you

know what? You're clever enough here. You don't want us on your shoulder. There you go, there's something. Go away and have a look at it.' You know what I mean?

**MO:** Right.

**Iain:** Writing OPDEFs [Operational Defect reports]. You know, things like that.

**Gav:** Hopefully, it will stand him in good stead. He's picked up his next rate [been promoted] anyway. And you know, it just them a ...a small glance of some of the things he's going to be expected to do. It's not a lot but it is a starting point, take that [...].

**MO:** Delegation, basically?

**Gav:** Yeah.

**MO:** Anybody agree with that? Or disagree, delegation is important? [pause] [nods, agreement]. Any other examples of how you would personally do it?[pause]

**Iain:** [...] Showing them that you're prepared to do the same job or at least show them once how to do it properly or the way you want it to be done. And...don't just give somebody a job and go 'right! crack on!'

**Simon:** You have to make sure that they are capable of actually doing that job.

**Sean:** Ah, I think that as well. Because if they are willing to do it, willing to progress. They'll have the enthusiasm to maybe read up a little more and do a good job. Whereas if someone's got ....'ah I can't be arsed.' So they just want to finish the job well then you might 'well, fine. I might just do it myself next time.'

**Chuck:** I agree with Iain. You can spot a good leader if they ask you to do something and you know they can do it themselves. When you know that they don't know what they are doing. When the order comes through and they ask you to do it. Its just got no weight behind it. [pause]

**MO:** OK.

**Simon:** That will annoy the junior rates more. Thinking 'ah actually, he's just given me a job to...I don't know if he knows how to do it'. [...]

**Sean:** Loose all credibility.

**Simon:** Yeah. [...]

## **HOW DO YOU PREFER TO BE TREATED?**

**MO:** OK, thanks for that. Is that the way you would prefer to be treated, the way you're treating..you..you are talking about delegation and you were also talking about being able to do the job yourself. Would you expect that sort of behaviour above you too, with the officers and more senior senior rates?

**Iain:** I've always like to think people should treat other people the

way they like to be treated themselves.

**Gav:** Yeah. I've always tried to do that. It might not have always happened but I've always tried it. In my personal life and in my work life as well. You always have to treat as you would expect to be treated...

**Simon:** We had this..old [previous] officer on board who's left now. You'd get an e-mail. I want this job doing by this time [taps on table] And let me know [tapping] [...] instead of talking to you correctly, how you should be spoken to.

**Background:** [Yeah, yeah]

**Simon:** Because you might get arsey about that or have a flea in your ear and you're like 'I'm not doing it.' And that's the way how everybody should be [?]

**Iain:** That example, I had similar e-mails. It was always, 'I need this done, by this time. If not, I want reasons why.'

**Sean:** I had e-mails once or twice. And the subject was nothing to do with me. So I was like...I didn't reply 'cos I wasn't happy with the e-mail, the way he worded it. And rather than replying and going 'Sir..you're talking about sea survival, I'm not the sea survival man.' I 100% agree with what Iain said that should treat as you want to be treated, because ...before... the question before ..if superiors should know a job before they delegate it. I dunno because I get asked to do something's and other people don't know what to do anyway? Like ...I dunno...OPS [Operations Officer] asks me to [...] 'cos like he doesn't know how to do it.

**MO:** That's an interesting thing isn't it?

Sean: Yeah.

**MO:** 'Cos sometimes as an officer you might not know the intricacies of how something is done. Erm...you know, is that like a problem? I mean there won't be any officers on here who can fix the radar set.

**Chuck:** It's not a problem. It is nice if you've got a question or you come to it and its 'Oh, you want me to do that, do you know how to do it? Can you give me a lead in?' Somewhere to start and then that's nice, when its just a blank canvas it's difficult. It's not wrong, but it's nice if you've got a lead in.

**Sean:** It depends if it's in your remit. You understand the aim, you should be [...] the officer's got his confidence in you then. You can do your job. If its out of their remit [...] You need to look for someone else.

**MO:** So what can an officer do if say..I don't know...say Nautis [Command system] has gone down or something like that and they don't know how that computer equipment works. So they are not going to have great deal of credibility as regards knowing how the system is fixed or even what the problem is. How would they....

**Simon:** There's nothing they could do with that.

**Gav:** One of the reasons, I think, we're here is for guidance for the officers. We get loads of junior officers you know the only ones with experience is the XO [Executive Officer] and Captain. So you should...they're looking to us for guidance. We've been around for quite a long time, some longer than others. Erm..but even just that initial first 6 months it's like 'Oh, I'll have a word with the XO, who deals with this?'[...] but it doesn't happen all that often.

**Iain:** I think a lot of the time, what it boils down to is politeness. It makes all the difference in the world to get phoned up and say 'Look, I've got a problem on the bridge, would you mind popping up and taking a wee look 'cos I'm not sure about it?' Rather than just 'WEO / DWEO: Bridge!' [Weapon Engineering Officer / Deputy WEO]. 'Right this does nae work.' Well, whistle! You know what I mean, It does nae...it's an old saying but it doesn't cost anything. I appreciate that scenario needs to change if you are on operations. But when you are pottering about the UK on [operations]..surely it cannae be that hard to ask someone just to pop up.

**MO:** OK, can I just go back to that e-mail? Because I am quite intrigued by that...

**Iain:** I've got a copy if you want it [laughter].

**MO:** MO, No, no you're alright [laughter]. So this e-mail went out as a blanket e-mail?

**Iain:** No, the one I got was just myself.

**MO:** And this was a common way...

**Iain:** It was just that person.

**MO:** So just this particular person giving instructions in this way?

**Iain:** Yeah.

**MO:** And it seems that just about everyone has received an e-mail from this person? [pause][Yeah, yeah nodding]. Apart from ignoring it, deleting it, what else can you do about that?

**Sean:** Give guidance and direction [laughter].

**MO:** And what sort of form would that take?

**Sean:** Well you could either send an e-mail back or pull him to one side, like...

**Simon:** .. into the mess, you could go to the XO and speak to him about his leadership techniques and how you approach senior rates etc.

**MO:** And you are quite happy to , you said invite him into the mess. You're quite happy to do that? Bring him into the mess and tell him you're not happy about his...

**Simon:** Yeah, it's just...take him to one side, because it's quite informal on small ship as it is. Take him to one side and say 'Sir, you do realise you're asking for this work to be done', I don't know the nature of what it was but it is quite a small task [yeah, yeah in the background] 'but surely...you could just come and ask me?' Instead of you know..its quite black and white and.....

**Sean:** The last one was [...] You get an e-mail and it is you know get this done by 1400...You haven't even logged on until 1500 and it's too late.

**Iain:** [...] Or its like 'I want this done by this time or if not..I want reasons why..' It's like he's copied that from someone else whose given him an example of how an order should be given or something like that and he's used it in e-mail form...

**Sean:** [...] poor leadership.

**Gav:** The one I got from the same person, it was very similar...he CC'd the Boss [Captain] in on. He e-mailed me and then CC'd the Boss. He could then slope up to the Boss so it would seem 'Oh he's taken charge of this'. But he wasnae, he was just sloping down and then he was obviously wanting to take the credit with the Boss [...] that it was dealt with but..

**Chuck:** So that then could be nipped in the bud by the Boss. Because if he's seen that and he's looked at that, he might be 'Hang on, I don't want to see him jobbing people off like that.'  
[...interruption] Well he then ..he is partly....he knows about it then. He could stop and then it's got weight behind it to stop it.

**Iain:** I don't know.

**Gav:** The situations that I was [...] I think that person who got jobbed off by the Boss, knowing the Boss probably politely or whatever he thought 'wait a minute [...] I'll show what I can do.' You know what I mean...He hadnae been CC'ing the Boss in...I know you were saying 'oh the Boss could of..' I don't think in that situation ..with the e-mails about that that would have been a problem..you know what I mean?

**Chuck:** Well if you just look at that at face value because I wasn't involved in that. Why would you CC the Boss on that? I don't know what the job was, I don't know if it had been going on for a while but there are different ways of doing it and maybe the Boss could have questioned it. [...]

[Two persons enter the room]

**MO:** I would just like to bring these guys into the conversation..well...hello! [laughter] Could you just tell me your names for the...

**Dave:** Yeah Dave and ....

**Bunny:** Bunny.

**MO:** Buddy?

**Bunny:** Bunny.

**MO:** Right, so go on...

**Sean:** The officer we're speaking about...his predecessor had a totally different leadership style it wouldn't just send an e-mail, he would come down and he would be very polite 'Would you mind? Do you mind?'

**Dave:** [Interrupts...] [Laughter]

**Sean:** ...and he would achieve so much. I had so much respect for him and he made such a difference.

**MO:** Do you think he got more out of his team that way?

**Sean:** Oh, 100% And he went on draft [posted away] and everyone's like 'oh, [...]'

**MO:** [To Dave and Bunny] We're just talking examples of good and bad interaction. And there was an officer, we don't need to know who he was, but he sent e-mails, he sent orders in the form of e-mails. Has anybody got anything to add before we move on? Probably quite a good point to do that because you guys can join in from fresh without wondering what on earth we are talking about.

24:58.2 - 37:54.3

## **TOPIC 3 – FORMAL AND INFORMAL INTERACTION**

### **WHEN IS IT APPROPRIATE TO USE INFORMAL INTERACTION?**

**MO:** Erm...So this is the last one then..erm...which is about formal and informal interaction and my first question, just to warm us up for that one is when is it appropriate to use informal interaction?

**Gav:** I think it can be but you've always got to have in the back of your head...you know...the situation. Whether its standing on 2 deck, you know, where everybody is walking past like that or whether its more of a tech office or an officer's cabin with the curtain closed you know, asking, 'I know its a bit of a pain in the arse but we're gonna do this, can you help me out?' Rather than standing there and going 'I want you to do this and that.'

**Iain:** I think the situation plays a big part...you know what I mean?

**Bunny:** I find, coming from a big ships background these ships are a lot more [in]formal. Because of the tiny community everybody gets know each other quite well from the top right down to the bottom. So it is a lot more [in]formal. Sometimes....I find that a bit strange to be honest with you. Because I am old school and used to being told what to do and tell my lads what to do. Whereas sometimes officers and senior rates are calling junior rates by their first names ...its...its strange to me but ...

**Dave:** It's bad on the Bridge for it, init?

**Sean:** Yeah and then when it needs to be formal, like when the junior rates get it wrong ...mmm...who's to blame?

**Bunny:** Sometimes the junior rates get upset when it does become formal because they are not used to it. Someone starts barking orders and they are like, 'What have I done wrong?' 'I'm just giving you an order, I want this done now.'

**MO:** Are you saying they don't know where they stand?

**Bunny:** Yeah.

## **SHOULD LEADERS MAINTAIN A DISTANCE BETWEEN THEMSELVES AND THEIR FOLLOWERS?**

**MO:** Erm...right, OK...thanks for that. Just following on from that, do you think leaders should maintain a distance between themselves and their followers?

**Gav:** Tricky one...I...I don't think...yes a 100% they do. I think....

**Sean:** [Interrupts] You've got have a good *working* relationship...

**Gav:** I think a lot of the time, especially on small ships, it does turn into a good working relationship. If you're completely 100% stand-offish , 'You've got to call me Chief [Chief Petty Officer]'

**Sean:** [Interrupts] You're not gonna have that bond then.

**Gav:** They might do the job, don't get me wrong, I'm not saying they won't. But they won't necessarily go that extra 10%...you know for someone who's just standing there barking orders.

**MO:** [Pause]. You just mentioned the Bridge before, you said it was bad on the Bridge what's the issue there?

**Sean:** They are all on first name terms. And then when you need to be formal, all of a sudden. They don't understand why its gone to 'sir' ....

**MO:** So what do you think is the effect of being informal on the Bridge if you are coming in ,let's say, I guess a situation that would call for formality would be something like Harbour Stations. I mean I can obviously pretty much understand what you are saying but just for the...just for the tape as it were..can you explain what the problem is with being informal?

**Dave:** Probably different during Harbour Stations because of the fact that you've got different people on the [...]. Over familiarity on the Bridge and suddenly everyone is just chit-chatting amongst each other, the officers having a laugh and a joke. As soon as something comes up and they're telling us to do something, they are still busy chit-chatting away and they're not like the right orders that they're giving. You see it a lot during breakdowns [machinery break-down drills]. I have to stand up there as a safety number during breakdowns. A lot of the time you notice it, I have to step in and say 'Hold on, you're here to do breakdowns and you're sitting here chatting.'

**MO:** So is it the ability to change gear?

**Dave:** [Nods] Yeah.

**MO:** Does everybody agree with that or is there....

**Sean:** It means they're understanding as well because they've got

no responsibility, they're happy just plodding along, whereas senior rates, leading hands, officers have got a responsibility to achieve stuff, an AB [Able Seaman] doesn't understand that.

## THE VALUE OF FORMAL INTERACTION

**MO:** Right, thanks very much for that. Erm...Thinking of formal interaction, I'm thinking even more, if you like, written orders, broadcasts, Daily Orders, pipes [broadcasts] that are made..that sort of thing. Erm...where its just a one way flow of information. What do you think is the value of that? Does that have a useful role?

**Sean:** It does, when thing go wrong, like an order. Daily Orders gives you, say, 'leave expires' [time to be back on board]. Someone isn't here for that time he ought to have read Daily Orders before he went on leave. So its good evidence then isn't it?

**MO:** Yeah...

**Gav:** I think there's definitely still a place for it

**Iain:** Yeah, I've got to agree...

**Gav:** There would be a lot missed if you did not have those situations.

**MO:** What sort of things, do you think, would be missed?

**Gav:** Well.

**Dave:** You definitely need it for CBRNDC [Chemical, Biological, Radiological and Damage Control] Definitely.

**MO:** OK

**Chuck:** You need it for discipline as well...

**Dave** [Interrupts] Change to the BDR [Battle Damage Response], Command Aim. You've got to stop and listen.

**MO:** OK. Anything else? You were going to say something?

**Sean:** No, just discipline you need orders to maintain discipline, otherwise everything would just fall wouldn't it? [.....]

**MO:** So having the Command Aim, would you say that is useful? Would you use it daily or just those situations that you've mentioned?

: I wouldn't necessarily say daily. When you're sitting alongside here

**Dave:** But [...] you know what the Command want, if they want 12 knots and one of the engines goes down, you know you have to inform them right way and come up with a way ahead. Try to get them back up to 12 knots.

**Gav** MO: Do you think, on the whole, information..I'm not talking about this Ship, I'm talking generally, in your naval experience if information is conveyed well in that sense, the formal information: Command Aims, Daily Orders. Are they reliable?

**Bunny:** It's a tried and tested system, to be honest. It works. Daily



Orders has been around since the day dot.

**Dave:** I think they need to be scrutinised.

**MO:** Yeah?

**Simon:** We've been here before. Like when the Squadron Commander came down [in charge of 8 ships]. 'You all happy with the programme? You all know what's happening?' [looks around theatrically] 'No.' [Laughter].

**Sean:** Especially small ships, we know the Long-cast [long term Ship's programme] is about 3 months long, on a big ship its 18 months.

**Gav:** That information's quite important.

[Garbled discussion]

**MO:** Do you think on the whole, we get that right, disseminating it down, that information?

[Silence]

**Dave:** I am sure some ships do.

**MO:** OK

**Sean:** It depends on individual as well, like our old [previous] OPS [Operations Officer] If there was a big change in programme, he'd get us in, 'Right what's happening sir?' But some departments, I know that doesn't happen. Sometimes with the individuals themselves.

**MO:** And what effect do you think that has?

**Sean:** Planning. Planning. If you don't know what's happening, you can't plan for things, without planning you can't achieve your aims.

**Bunny:** Sometimes it goes between departments, you find out something from an AB [Able Seaman] and as a Chief or a PO [Chief Petty Officer / Petty Officer] you think 'I should really fucking know about that.' There has been a few incidents between departments. 'How's that happening? Oh, right I didn't know about that!'

**Gav:** [...] It's almost like a morale thing. If you've got your plan 18 months ahead. At least you can take it home to the missus and its almost set in stone, you know what I mean? Unless...it'll take something major to shift this. Here's where we can book the holiday. [...] Whereas we're lucky to know what? 3...4 months. Its like, 'look...I don't know if I'm home Christmas....I don't know if I am here for the kids' holidays.' You know... Nobody's telling me. It does vary with personnel. I'm not necessarily gonna say the better XO, but some XO's will push the OPS to get Fleet [Navy Command] to programme out [plan ahead], even if its only pencil thin..you know 6 month, 12 months down the line.

**Iain:** It is a morale....better morale...obviously it means senior rates and officers can say to the lads [...] 'This is what we intend to do.' You know? 'We're planning for these things to happen'.

**MO:** Anybody else?

**Chuck:** There's three things that keep people happy on board

generally and that's leave, pay, food. They've got to be...got to be set in stone they have. People have got to know when they're gonna get home. Got to know that they're getting paid right and the rest is just daily...

**Sean:** We can't do nothing about the rest [laughter].

**Chuck:** Can't do anything about the rest.

**MO:** Can't do anything about the pay. But you say leave, pay and food. So is what you are saying that, if I am understanding you right, is that we should know what we they are going to be, that they are reliable rather than ...You're not saying more leave, more pay, better food, you're saying it should be reliable?

**Chuck:** Yeah, exactly.

**MO:** Do you all agree with that?

**All:** [Yeah, yeah. Nodding.]

## **CO'S AIMS AND OBJECTIVES**

**MO:** OK. How are you made aware of the CO's aims and objectives?

**Sean:** They get piped [...] like pipes for Harbour Stations [entering and leaving harbour] [...]

**Simon:** Ships I've been on have been quite good at putting out what he [the Captain] wants [...] I've never seen anyone different to that.

**All:** No.

**Chuck:** Clear lower deck [muster the whole ship's company] [...] Any changes in plans he'll have [...]

**Simon:** Just making pipes [broadcasts] [...]

**MO:** Do you think that makes a difference?

**All:** Yeah.

## **HOW CAN LEADERS REDUCE THE DISTANCE BETWEEN THEM AND THEIR FOLLOWERS?**

**MO:** How can ...this is the last question in this section and then we will have some ending questions. How can leaders reduce the distance between themselves and sailors or the guys that work for them? We have discussed whether they should or not but this is a different question. Assuming that it is a good thing how would you go about doing it?

**Sean:** Subordinate development that way you're working close to them. And there again it depends on their attitude because..see the attitude of some of them, they're happy where they are. But if they are willing to you can try and develop them.

**Gav:** Team-building exercises. Social events, sports events.

**MO:** What sort of team-building exercises?

**Gav:** Well....

**Sean:** Pool and darts...[Laughter]

**Gav:** We tried to arrange a team building day out. Not long ago. So we came up with some ideas, in fact the Junior Rates come up with some ideas...good ideas. But they were told separately 'No they're not good enough, we're going to spend the day in the gym running about.' [...] 'No, fuck that.' And no interest whatsoever and it did not help matters.

**Chuck:** Well that's a break-down then init? You've asked for some ideas but you've done what you wanna do anyway, so what's the point of asking?

**MO:** Backfired?

**Chuck:** Yeah.

**Gav:** Social events, you can always do something like that. It can be reasonably quickly arranged.

**MO:** [to Dave] You mentioned social events as well?

**Dave:** Yeah even daft things when we are at sea. Bar-b-ques and stuff like that when we were at sea. Like we were on our way to the **Gulf**, going through the med and they worked well, everybody looked forward to Saturday.

**Sean** [...] they'd do a bar-b-ques then the Junior Rates do a bar-b-que.

**Dave:** Even simple things like a Saturday or a Sunday routines [relaxed routines / days off] at sea, you'd see a change in morale [...]

**Bunny:** Quiz night as well. [...] quizzes and so on. Again it was Senior Rates and Officers were in a team a quiz after a bar-b-que and it would work really well.

**MO:** Was that people in their messes [quarters based on rank] or was it mixed?

**Sean:** Oh no, it was mixed.

**Bunny:** So it would be like the MEs [Marine Engineering Department], Divers...Mine Warfare [...] it was a right mix and match

**MO:** Er...OK, anything else on reducing the distance?

**Iain:** Generally it's just more face time, you know if the lads see you a lot more. Instead of once a week or...always helps.

**Bunny:** Again that's a good thing with small ships because its such a small team. You get to know the lads quite well.

**Dave:** You meet the people you work for every day. It's definitely different on small ships, you don't see the senior rates.

**MO:** OK, right anything else on that. Just looking at the time there....that's fine...

37:46.3 - 41:06.0

## ENDING QUESTIONS

### WHAT ADVICE WOULD YOU GIVE TO A JUNIOR

## COMMAND TEAM?

**MO:** Right, I've got some ending questions now and erm..and this is really just to try and summarise everything that we've discussed. And my first one is: if you were advising a junior command team during sea training, say you were a FOSTie [Sea Training Staff], erm...what would you advice be on how to interact with the crew? [Silence] Say if you were working for FOST [Flag Officer Sea Training] and you had a ship going through [on training] and it was a brand spanking new Captain and XO [Executive Officer], Navs [Navigating Officer] and so on, what advice would you have for them?

**Sean:** Be polite.

**MO:** Yeah ?

**Sean:** If you're polite and well mannered, if they have got a problem sometime, he'll approach you then, with confidence. If you're [...] and shouting, if they have got an issue, they're gonna be to scared then to approach you.

**Chuck:** Yeah, the Navy's not a democracy but manners don't cost anything as well.

**MO:** OK.

**Gav:** [...] Get out of your cabins and off the computer you know, get amongst it. The men see [...] getting involved in part-of-ship [work areas] and they'll see on their own terms in their own environment ...it's a wee bit more comfortable than meeting you in your cabin or the wardroom [officer's mess]. You know. they're like that and oh.....

**MO:** Can I ask everybody so Bunny, what do you think?

**Bunny:** Well, from personal experience of OST both down south and up here I find the OST staff up here are more into teaching. Not standing and screaming ..deficiencies or..'Leading hand. Do this right!' or ...its more constructive up here. My first OST was last year on small ships, I actually enjoyed the experience whereas...its like 'What are they going to rip us for?' When are they going to start screaming and shouting. Whereas FOST North were like 'Right. That's where you went wrong. But that was your good points. Take the good points, take the bad points on board, next time we'll do it....

**Dave:** More rubbish!

**Bunny:** Improvement.

**MO:** You preferred that?

**Bunny:** I did, I found immensely beneficial. The FOSTies...they're all on our team.

**Dave:** Explain where we are going wrong, 'cos it is training. You want to see them starting here [holds hand low] and go up to the top level [describes with hand]. And that's what you want. Because as soon as someone starts to shout at you, you just go 'Yeah.

	<p>Whatever.'</p> <p><b>Simon:</b> Especially if they're on the same level as you. A PO [Petty Officer] shouting at a PO. You just want to go 'Hold on, mate.'</p> <p><b>MO:</b> OK, that's the FOST staff, would you the same advice to the Command Team?</p> <p><b>Dave:</b> Yeah. You have to be careful how you approach the FOST team as well, you can't just go to them and scream and shout 'cos then their back goes up. It's give and take on both sides.</p> <p><b>Chuck,</b> would you like to say something?</p> <p><b>Chuck:</b> It's the same as everything. We're repeating a lot of the same things. What we're saying is: the way you treat someone. How you would ...</p> <p><b>Bunny:</b> be treated.</p> <p><b>Chuck:</b> Yeah. The same. And that's where it comes in all these questions, really you know. [...] You're giving an order, how would you expect it.</p> <p><b>MO:</b> Thanks very much, I am going to summarise and then ask one last short question.</p>
41:05.9 - 41:37.0	<p><b>SUMMARY</b></p> <p><b>MO:</b> I'll just summarise first, just to make sure that I've got it right. So we said, we spoke about interaction generally but just on the key questions there, I think you all said that er...interaction does affect performance, good interaction does so positively. [Nodding]Its not just a case of giving people their orders and then they just get on with it. [Nodding] You gave some examples of positive and er...negative interaction and I think that...just to go back to that theme that you just mentioned was right the way through it [Nodding] Treating people the way you would like to be treated. [Nodding] Erm...we spoke a little bit about formality like..broadcasts and pipes and I think you felt that those were useful [Nodding], sometimes there was an issue with the quality of that information but , on the whole, you thought it was useful. Is that er...a reasonably good summary? [Nodding]</p> <p><b>Sean:</b> Yeah.</p> <p><b>MO:</b> Is there anything I've missed?</p> <p>[Pause]</p>
42:02.8 - 45:09.2	<p><b>HAVE I MISSED ANYTHING?</b></p> <p><b>MO:</b> So my last question then...I'm just starting this research now, I've just done two years ..erm...I do this part-time, I've got a day job. So I've just spent two years boning up on the research techniques and now I'm trying to find out...er..so I've learned the theory and now I want to find out what is actually important on ships. And I've</p>

only just started doing that, I've done a couple of focus groups, so I just wanted to ask if you think I've missed anything in my line of questions that you think could improve the sort of discussion or if there is something else I should be asking?

**Simon:** I wonder...is there anything they can change at Leadership School? I don't know, on your findings ...

**Sean:** Is there like a common thread?

**MO:** Well leadership training is changing all the time so, I talk to the Commander who is charge of all the leadership training in the Navy. Actually his predecessor came up with the Command Competence Framework, which I am researching. So I talk to him all the time. So I cannot say that just because I find something in my research, they will definitely change the leadership training. But that's the idea of doing the research. that it would be used to inform training in the future, so I'll say yes but...

**Simon:** Is that across the board , at Dartmouth [Officer's training establishment] are they getting trained the same type of leadership styles as....

**MO:** Yeah. Basically yes they do. When you join Dartmouth as an officer, you get exactly the same leadership package as you would do at Raleigh [Junior Rate training establishment]. It's called Action-Centred Leadership. So that's the same package that the officers get but there's also now this thing called the Enduring Leadership Programme. Because they want to....so now when you go and do your killick's [leading hand's] course and you do a bit more leadership, officers didn't used to do that. Now they're trying to bring that in for officers. In fact they have brought that in for officers so...when officers have finished say an XO's job here before they go and do PWO [Principal Warfare Officer] course they go and do a top-up which is similar to sort of, killick's course. And they want to build that up so even at the senior levels ...so I am trying to portray it....so at the middle levels they will do transformational leadership [Nodding], but at the higher levels they will do strategic leadership which is more about decision making. So yes, all this research will go into the selection procedure for Commanding Officers and also the leadership course throughout the Navy. The information will go to the people who design those courses but obviously I cannot say whether....erm..but the better my research is, the more likely that you know..the better interaction I have with you guys..the better...the more like likely I can make...er....suggestions and advice..

**Sean:** Yeah.

**MO:** And obviously the better my research is, the more clout as well Anything else? [Pause] OK just general question? OK, I'll switch that off.



10:00.0 -  
3:20.1

## INTERACT FOCUS GROUP S2 - TRANSCRIPT

DATE 20 June 2012

VENUE HMNB Clyde Maritime Operations Centre - Room 220

### PARTICIPANTS

Name	Gender	Age	Consent
Tommo	M	31	√
Chris	M	34	√
Jim	M	32	√

## OPENING QUESTIONS

### INTRODUCTION

**MO:** Ah, there we go...OK. Sorry about that...OK...so...We're talking about interaction, so that is what I am specifically interested in. How you interact with your seniors and how you interact with your juniors and your pretty much everybody. So my opening question, which is really just to get the ball rolling and break the ice and it won't take very long [laughs], it is just to tell me your name i.e. your nick name which you want me to use and just tell me how long you have been on the Ship. That way I get your voice and your accent on the thing so I can identify you, so I'll start with you.

**Tommo:** It's Tommo, I've er, been on the Ship, er, for 3 months...

**MO:** Sorry, I forgot...and also how old are you, if you don't mind.

**Tommo:** I'm 31.

**MO:** Thank you.

**Chris:** My name is Chris, I've been with the *crew* er...2 1/2 years. I've been on the Ship since the 3rd, 6 weeks I've been on this ship? I've been on this ship 6 weeks.

**Jim:** Jim....

**Chris:** I'm 34.

**MO:** Oh, 34...good point, thank you.

**Jim:** Jim, 32 and I've been with the crew a year and a half.

### INTERACTION - FIRST THOUGHTS

**MO:** Right so this is an introductory question. Er...and that is: what is the first thing that comes into your mind when you think about interaction between leaders and followers?



**Tommo:** Segregation?.....Between er...the ranks. As in distinguish yourself as a senior rate and then....as a junior rate and then...the officers. And to be able to stamp your authority in that position that you lie in at current.

**MO:** OK and you think that is an important thing? So why do you think that is important?

**Tommo:** So you have that rank structure. As in the chain of command. And to use that correctly in that management er..style.

**MO:** OK, anyone else on that one?

**Chris:** I don't fully believe it comes with rank. I think there can be a mixture...and I think you can see in the junior rates mess there is a leader. He may not be the killick [leading hand] of the mess [leading hand of the mess: in overall charge of the accommodation area] and actually people gravitate towards him. However, I do think that the rank structure needs to be there in order for it to compute..and I think a good leader coming through the junior rates mess realises that and he may not be the best follower but in order for him to lead he also need to follow and know the rank structure and function in that field, if you like.

**MO:** OK, Jim, any thoughts on that?

**Jim:** Yeah, yeah. You're either one or the other aren't you? [background: yeah, yeah] Either a follower or a leader and its natural instinct 'init? You get a group of guys together, one's gonna be a leader..well...more than one possibly.

**MO:** Right, OK. Thank you very much.

**Chris:** I think in the Navy if you have more than the same rank it, so for example, the petty officers here, its why we chose the like of giving him the rank of buffer [Chief Boatswain's Mate, shortened to 'buffer'; a position on board a ship to manage seamanship]. So say, for example, on a dive team, you have 7 killicks. One of them is named the buffer and he's naturally been given that leadership. So it can be awarded to them but it..you know...it doesn't mean to say they are the best leader for that task.

[Pause]

**MO:**OK, that's really interesting, we'll probably come back to some of those points. erm....but that was just to get the ball rolling.

23:20.1 -  
8:39.3

## **TOPIC 1 HOW DOES INTERACTION AFFECT PERFORMANCE**

### **DOES INTERACTION AFFECT PERFORMANCE?**

**MO:** So my first topic: how does interaction affect performance? And my first question to get that going, I suppose it's a really obvious question. Does interaction affect performance?

**Chris:** Are you talking about interaction as in a personal level?

**MO:** Yeah, well what I'm interested [Chris: [...]] no, no ...I'm really thinking with each other but also you know...do you think you need to have interaction with those people that you work for other than..obviously they need to tell your task description but do you think you need to have any other kinds of interaction with them?

**Jim:** Like a bonding kind of thing?

**MO:** Well...I...I...I am quite happy to play that openly. So I mean, different groups have come up with different ideas about what different sorts of interaction might be.

**Chris:** There needs to be a cut off..there needs to be some sort of level of interaction but at the end of the day there needs to be the point of drawing before it becomes too familiar and you need to know the boundaries of that. Otherwise it affects certainly through my job I've seen it affect discipline where ABs [Able Seamen] to an officer have not reacted immediately [clicks fingers] when the officer wanted them and its created the officer to get angry over that situation and I've gone to both parties in my job and said, 'you need to react immediately and you need to keep your distance from these lads.' as in that's what's created that issue.

**MO:**OK, so that was specifically an interaction issue...

**Chris:** Absolutely...

**MO:** The wrong kind of interaction or....?

**Chris:** Well, they were over familiar on the Ship. Drinking...late night drinking together and things like that. All of a sudden he then needed him to do something. He's like [laughs] he's having a laugh and a joke. 'No! Now!' And if you don't have that boundary, they'll never ever know. So interaction.....there needs to be a level but it needs to know where the divide stands.

**MO:**OK, anybody else on that?

**Tommo:** It's er...do we not fully promote as the Royal Navy that the 'Team Works' [RN Slogan]. Therefore does that not bring in that ethos of erm...yes, massively we need interaction with each other because if we are at sea in the middle of the Atlantic and we're tackling a main box [engine room] fire then you need to know that...the WEO [Weapon Engineering Officer] is doing his job on the Bridge, the MEO [Marine Engineering Officer] is coordinating the battle etc. Therefore if there is no interaction we don't know how to deal with each other so I think as a job we have in the Navy we massively promote interaction really. That's why we like team sports, football, rugby and that. But I totally agree also that there has to be....definition.

**Chris:** Interaction is great as long as everybody understands that when the order is given...For example, fighting a fire and the interaction's gone too far and they're all going 'yeah, yeah, yeah.' You know what I mean, it's not then 'Right.' When it's that instant that you need everyone to click. 'Yep! That's the MEO, that's the Bosun [Boatswain]. He's telling me to do that.' So immediately go and do that. 'Cos it's what everyone needs to do isn't it?

**MO:** What's your thought on that, Jim?

**Jim:** Yeah..yeah...I'm ...I'm...er.....in agreeance with that. We definitely need that interaction but there's also got to be a line where it stops, 'innit? Like your young lads, they're developing. You've got to let them crack on, haven't you? You can't always be on their shoulder....

**Tommo:** If you go back to the start when you join the Royal Navy, whether it be Dartmoor [Dartmouth, officer training] or Raleigh [ratings

training] ...you generally don't get much interaction you know....if it's a Leading Hand or PO [Petty Officer] they take you for lessons and they don't see you at night. That is where it starts and when you join a ship...a small ship...there is a lot more interaction on a small ship than a big ship and I've seen that massively 'cos I've come from two different backgrounds and there is ...yeah.

**Chris:** I agree with Tommo. I feel that works , the interaction is good to the point that everybody understands we all still have a job to do and when it gets past that beyond point and the interaction has gone too far.

**MO:** I just want to take a note there because there is something I want to come back to. I'm also conscious of the fact that I said 'good' very loudly when you said something. I really just meant that I was encouraged that you were giving me your opinion not that I necessarily....[agree] And that is one of the things that I won't necessarily agree or disagree which sometimes makes the conversation a bit weird, frankly, because if you are talking to somebody and they are neither agreeing or disagreeing it seems a bit strange. So I'll just warn you about that. It's just that I want to hear your views, I already know mine and I'm bored of those. Right, so that was very good, thanks for that.

38:39.3 -  
10:42.2

## **TOPIC 1 HOW DOES INTERACTION AFFECT PERFORMANCE**

### **HOW DOES INTERACTION AFFECT PERFORMANCE**

**MO:** So my next question is very similar to that really. We've just discussed whether it affects or not...interaction. Now I'm going to ask a subtly different question and that is *how* does interaction affect performance? What are the mechanisms by which....

**Tommo:** You ...er....you're building respect? So....if I carried out interaction with a superior you build that kind of respect between you and him. And you're much more likely to perform in a task doing something that you've got respect for ..whether it be a superior or whether you are handing down a job. But that's all about gaining it.

**Chris:** That's a positive interaction though [Tommo: Yes.]. There's a negative interaction though isn't there? [Tommo: Yep.] Where you've been on the drink with the Commanding Officer and you've seen all his....all his [laughter] all his skeletons in his closet [laughter] and you're sitting there thinking 'You int, you int all that respectable.' You know, when you're sitting there and now he's barking the orders and you're 'Hey, you gotta be whiter than white to be doing this.' So there's a negative. [...] Yeah. Interaction generally is in a positive fashion so you're like , 'I like this guy, I'm gonna work for him, I'm gonna work bloody hard for him.'

**Jim:** There's professionalism as well isn't there?

Erm...knowing....again..it's boundaries 'innit? There's boundaries everywhere you work?

**MO:** So what I am getting from you, all 3 of you, I think. Tell me if I am getting this wrong . But you are basically saying interaction is good. It's

good for teamwork but it's got to be within a certain framework so....you can't go too far, you can't have too much interaction..you can get too...too familiar. You're all nodding so...I've got the right instance there..er...I mean understanding. [All: Yeah, yeah]

410:44.0 -  
19:53.9

## **TOPIC TWO - WHAT CONSTITUTES GOOD OR BAD INTERACTION?**

### **GIVE AN EXAMPLE OF POSITIVE INTERACTION**

**MO:** So my second topic is what constitutes good or bad interaction. And just to start us thinking about that I would like you to think back to an instance of positive interaction with a superior and perhaps you can just give me that example, if we can discuss that and what made it seem beneficial to you.

[Pause]

**Chris:** [To Tommo] I'm waiting for you to go first. [laughter]

**Jim:** Dogwatch...Dogwatch [evening] training I used to get as a lad. [...] My killick [leading hand] would take me aside and sit me in the flat [passageway]. You know that was my time and the working day had finished. Time to get your head in the books and get yourself progressed. And they would sit with you and take you through stuff and showed you the direction...

**MO:** Task book training?

**Jim:** That just seems non-existent now. It's all just down to the individual to crack on and ...

**MO:** What then were the benefits of that other than the obvious thing about learning for you next rate [rank] and for your task book and so on but why was that so good?

**Jim:** Well there's a lot of benefits. It made me feel part of...'cos obviously I was a new lad ..join the team...got integrated into the team you know? There was the Buffer [Chief Boatswain's Mate] who'd take me through stuff and made sure I was doing it the correct way.

**Chris:** Showing them that they were giving time to you isn't it? They're dedicating time to you so it's a positive interaction.

**MO:** Yeah, OK. Anybody else? I think since we have just three of you, I might just get each of you to speak...

**Tommo:** I think erm...slightly going back to the interaction side of things. Sport is a good level playing field. You kinda erm....if you've got the Captain playing on your football team you don't shout across the field, 'Sir!' it's 'Give me the ball, mate.' It's a level playing field and I see that as er...

**Chris:** Then if you see them getting stuck in [Tommo: Yes] like you're getting stuck in and everyone's trying to achieve the same goal and then it's everybody on the level playing field isn't it? [All: Yeah]

**Tommo:** And I...and I...and this is a slightly negative so I'm jumping the question...erm...I remember being out playing for one of the ships...er....one of the sub-lieutenants walked in and we're all just getting in the changing room and he said, 'Yeah. Don't bother about sir.' And

there were other officers in there and everybody just looked at him and everybody just lost respect for him straightaway. Because he was obviously putting himself on that pedestal. So I think it's like an unwritten rule in sport and interaction

**Chris:** Well, you're either good at it or you're bad at it. [laughter] The natural leader on the pitch is normally the fella that...or maybe more vocal but...he's generally the better one at sport 'int he? You know.

**Tommo:** Yeah, but ah...that was the negative. Whereas you just lost a bit of that respect possibly. But that's true on the sporting level.

**MO:** That's useful, thanks. A useful example, thank you. Could you give us a positive one as well? [pause laughter] Put you on the spot.[Pause] Maybe Chris can while you think about it?

**Chris:** Er....a positive interaction....Ship's bar-b-que, you know. The Skippers [Captain] cooking the dinner ..you know and having a crack. And they're socialising to the correct level, you know what I mean? At the level of the lowest common denominator..you know what I mean? And I shouldn't say that but. You know what I mean. You feel that, and when I see people who say, for example, if they call someone an arse-licker I think it's their problem. It's them that's got the bad communications and communication is: you wanna speak to the AB [Able Seaman] and communicate with the wardroom. You need to communicate across all spectrums. And if they are viewing you as an arse-licker I'm viewing them as having the problem having the bad communications. An officer demonstrating *that* very well, picking something that he knows about...AB Clark and remembers about him, 'He plays rugby.' And he is showing an interest in his rugby and he is showing an interest in his development i.e. across the breadth of the Ship's Company so he engages with the whole lot. There's positivity in that. At the Ship's bar-b-que, he's cooking but then he knows when to cut the line, 'Right. Everyone's had a few too many drinks', you know, the finger pointing is starting, 'I'm off to bed now.' Leave it with the senior rates or the warrant officer or whatever to deal with the rest and send them to bed, like. And they are seeing positive interaction between that and it works you know. Communication across the...it's what I am saying, being able to speak to everybody not just within the Wardroom [officers], within the senior rates mess, within the junior rates mess you know....

**MO:** OK, thanks very much. Did you manage to think of any....

**Tommo:** Yeah...yeah ....I think er....again...charity...er....I was on one of my ships and we did a charity event and it really was a mix of junior rates, senior rates and officers mixing together and it was...just complete across the board: no rank [officer status] no rate [non-commissioned status] and you had the four ring captain [Captain rank: four stripes] down to the AB chef [Able Chef] with a pot of paint on this orphanage cracking on and there wasn't any ...sort of....you know. And that was a positive interaction, you just got stuck in and saw what was what and achieved.

**Chris:** Is that when everybody in the whole group of you are going for the same goal, i.e. the goal is to have this orphanage painted in three hours?

**Tommo:** Exactly.

**Chris:** But on the Ship the Skipper [Captain] has his goal [Tommo: Yep]

I.e. to drive the Ship to get to the Gulf. And your goal as a Petty Officer is to make sure the SPO [Ship's Protection Organisation] team is trained. You know what I mean? To provide to the Captain that role [Ship protection] or..the Gunnery Officer's job is to make sure that everything is ticking over in that department. So on a small ship not everyone understands that each person also might have their individual goals instead of the team collective to get to their thingy....But in those positive instances *everybody* in the football team is trying to win. Whether they be a Petty Officer or an AB, everybody on that day was trying to paint the orphanage.

**MO:** Thank you very much. Also I think it's very interesting what you said because you gave two examples which are actually very similar in many ways because you said the young Sub-Lieutenant who said 'Don't call me sir.' So he was trying to achieve a level playing field also and you said that was bad interaction. But then you also said that when you were painting the orphanage and you all have a level....and there are no ranks and rates, that was good interaction. So I wonder what is different between them two? [Mumbles] I wonder why. I am not saying you are wrong for a minute. That guy has said 'Don't bother with the sir.' and everybody there according to your experience has gone, 'That's a bit ...' It hasn't hit them the right way. Yet when the Captain got his T-Shirt on and started painting the bulkhead [wall]...you know..everyone is 'OK, I'm happy with that.' There must be a difference there.

**Chris:** Communicating?

**Jim:** Self respect 'innit? At the end of the day, he is still your Captain stood in a manky old T-Shirt, painting in an orphanage in a hell-hole, having a crack and a bit of banter. And once you're back on board ....that's it. It's self respect for one another 'innit?

**Chris:** Do you think there was no requirement for him to say that?

**Tommo:** Yeah.

**Chris:** The way he communicated it...

**Tommo:** Yeah and when I go back to that time you just [shrugs]..

**Chris:** Unwritten rule.

**Tommo:** Unwritten rule that when you step onto a football pitch or a rugby pitch..all for one and you know....we were in that orphanage and everybody knew that was a ...

**Chris:** Shows a lack of experience in his people skills.

**Tommo:** Yeah.

**MO:** Do you think by mentioning it, he is bringing attention to his officer status? Rather than if he just got on with it, it would happen automatically?

**Chris:** Yeah.

**Tommo:** Again..you know...nothing against the guy. I'm pretty sure now, he wouldn't step in a changing rooms and go ....He learned from his mistakes.

**MO:** It's an interesting example though I think to explore that one because...

**Chris:** I think it must be down to communication. He could have come in and said, 'Right lads, Lieutenant Such-and-such. Please call me ..John.'

And they might have taken it a different way. 'No need to call me sir today on the football pitch.' You know and you think [grimaces] [laughter]. It's the way you communicate isn't it? He didn't have to say it at all, just get out there, get his football strip on and get out on the pitch like everybody else. You know.

**MO:** I think its these subtle things that probably make a difference, that's why I am trying ...that's what I am trying to explore with the research. I think a lot of people do the right things by the numbers but it somehow doesn't translate and that's the sort of thing I am interested in but I don't have any answers.

519:47.0 -  
33:58.4

## **HOW DO YOU TRY TO INTERACT WITH YOUR SUBORDINATES?**

**MO:** OK, so the next question is how would you personally try to interact positively with your subordinates? What sort of example do you try to give?

**Chris:** A good one. Obviously within the ...I'm not trying to say 'within' in our small community, I believe fitness and leading from the front is vitally important and I think there is a direct link between leadership and fitness. Looking the part, being the part, being able to function and allowing them to see you as the leader within it. But incorporating them in the group for example, I would er...my interaction would be within sport within..playing football...within training on the back end [stern: area often used for physical exercise]. I often within our small community organise a circuit ...draw them in. It might be with a little bit of banter there will probably be non-PC banter involved ...er...but it seems to have worked for me. They might be sat in the mess saying, 'He's an incompetent wanker.' [laughter]....but you know what I mean? Maybe it is because I'm a Petty Officer that they do it for me, I don't know. So there can be interaction that way. I can interact socially with a beer but when all this interaction comes, as soon as you let your guard down or end up with a skeleton in your closet, there is an opportunity for them to lose respect for you. So you also need to be wary that you don't take it too far.

**MO:** Why do you think fitness in particular [disturbance from mobile phone]. A bit embarrassing. Sorry why...

**Chris:** Why?

**MO:** Yeah, why fitness in particular? When I've asked this question, I've not had that before so I just....

**Chris:** There has got to be a direct link between fitness and leadership in that ...if you look at anything. I've tried to dive into this in my...own....sad little thing that I like reading about Genghis Khan, leadership skills or whatever. And it is a fundamental direct link. If you are fit....you have stature. They will gravitate naturally towards you and ...it works. There is definitely a direct link between the two....erm...I can't think of a natural leader that is unfit, overweight, out of shape, cannot stand up whilst stringing a sentence together because he is so out of breath because he is at the top of the stairs. He can't communicate properly or he's the fella that you've got someone to go and do the work and he's off smoking cigarettes on the jetty for 45 minutes 'cos that is his life style, you know?

You're there looking at him thinking, 'Oh, he's off smoking again isn't he?' Instead of being able to demonstrate...you get promoted to, in the Navy, to show people how to work, not to not do any work. And there is a direct link in being able to look after yourself and keep physically fit. I mean we actually do it ourselves. Who do we promote? The bloke fit enough to pass his RNFT [Royal Navy Fitness Test], does a good job and can look smart. Or do we promote the bloke who can do a good job but can't pass his RNFT? So we're promoting it. So there is a direct link. So obviously someone out there thinks there is a direct link.

**MO:** OK, yeah. I'm not disagreeing with you. I've read about that but it's the first time I've heard someone state it. What do you two think about that?

**Tommo:** Yeah, I'm not just gonna jump on Chris's back and say 'Yeah, great.' I think there definitely is...er...you know...If you can look up to ...er....I don't know...say....say...if my WEO [Weapon Engineering Officer] was completely overweight and...you know.....

**Chris:** [Interrupts] Er...I ...can...I...I know it's not PC but, sorry to [to Tommo]...you've already got something against them 'cos they can't do something already, so you can see that they can't do something...and....and....so you've already got a negative against your leader already instead of a positive and saying, 'Oh, Christ. He plays football with the lads. He gets stuck in. He plays rugby with the team. He takes them out coaching. There's definitely a direct link.

**Tommo:** The Navy obviously promotes this because we go and do leadership courses. OK I know we have to be at a certain level to carry out fire-fighting and stuff. However, we go onto a leadership course and...let's be honest....40, 50% of it is are you fit enough to pass that mile and a half? Are you fit enough to do that bleep test or are you fit enough to go up to the Brecon Beacons etc. etc. So....like you [Chris] said there is obviously someone out there who says fitness should be looked at to be a leadership....to be a leader because you won't be promoted if you don't pass your fitness test and you don't complete your LRLC [Leading Rate's Leadership Course] or your SRLC [Senior Rate's Leadership Course].

**Chris:** If you don't pass it, it's 'cos you can't be arsed...

**MO:** Jim?

**Jim:** Yeah it's also like Tommo said there. You look at the guy, if he's the same level as you. If you're in date for your RNFT, you're on an equal there aren't ya? Right he's your boss like Chris said, you're going to have negatives against him for being a failure. Like my motive for passing my RNFT every year is 'Right, I'm not letting the young lads beat me.' I'm not going to be on remedials, embarrass myself. So that's my motivator for it.

**MO:** So...right ...so...we've been talking about how you interact so you mentioned that er...[Chris: Fitness.] leading by example and fitness and bearing? [All: Yeah] I think you said. Has anybody got anything else on that?

**Tommo:** I think you've got to be able to..if you set a task you have got to competently do that task yourself so whether it be a bit of equipment on board. I say to one of the lads on board, 'Right I need you to strip that



mini-gun, re-grease it, get it back up there and I want it back in an hour.' Can you actually do that? If he turned round and he said 'Well I'm not sure.' Its 'Right, this is how we do it. We strip it, we get it done, we take it apart and put it back together.' So I think you've got to be able to carry out the task that you are actually setting out. Er...and I think that is vitally important for your subordinates to say, 'Well he can do it. So I want to learn and get to that level.' And ultimately get to that level and the chance of promotion.

**Jim:** And you need to adjust that accordingly as well if you've got a guy who's not so switched on really. Or a new joiner, you need to take that time out with them don't you? Some mornings you might need to kick arse and ..you know.

**Chris:** There's a leadership skill in that engaging up leadership against that person. What is it you require?

**Jim:** In the mornings, shouting on OST [Operational Sea Training]. When they are a bit slow getting squared away with the lads...

**Chris:** You've got to look at the individuals to tailor that like you just said. [pause.] But I think in the Navy, we've always promoted actioned centred leadership..but it's changed now I believe. [Jim: situational leadership] Situational leadership now isn't it? It didn't always suit every individual. There are individuals on the Ship that don't function unless you rip them a new arsehole. Excuse the language on the tape [MO: That's alright.] Or there's more functional blokes on the Ship that if you go like that to you won't get an ounce of work out of them. You know and we've always had this and yet we had to take that leadership course and adapt it to the individual. The leadership course is teaching you to do it across the board.

**MO:** So that was something you learned at the leadership course?

**Chris:** Yes, certainly.

## **IS THIS THE WAY THE WAY YOU WOULD PREFER TO BE TREATED?**

**MO:** OK thank you very much for that. Erm...OK. You've mentioned the way you interact with your subordinates and is that the way you yourselves would like to be treated?

**Tommo:** Yeah.

**Jim:** Definitely. You wouldn't ask anybody to do something you wouldn't do yourself. You don't speak to someone like a piece of shit because its just not the done way is it?

**Tommo:** At the end of the day you've always got someone to answer to therefore you treat the person like you would want to be treated and I think....However you've still got that, you can go back to that rank structure.

**Chris:** I think it's a very interesting question, I am not entirely sure the way I treat some people. Would I appreciate that being treated, the way they treated to me? 'Cos I sometimes sit there and think. You must have that feeling when someone's bugged you in a certain manner, you think 'Don't treat me like a kid, I know I'm doing.' You know? And I've got no

doubt that when I do that to a Leading Hand or an AB. I can imagine he's sitting there going, 'Oh, he's on it again isn't he? His telling us exactly, I've done this 17 times before.' But then you sitting there maybe, 'Didn't do it to the required standard and he's done it 17 times before.' So you're going through the whole list of....

**MO:** The question is really saying, you know, is there ..would you treat a junior AB in the same way that you would expect to be treated as a senior rate or...would an officer expect to be treated in that way? [Chris: No] Are there different leadership styles for different positions [Tommo: I see where you're going.]

**Chris:** Definitely yeah. Not everyone is the same individually.

**Jim:** I have that when I'm taking the officers and senior rates for their SPO [Ship's Protection Organisation: firearms procedures]. You have to play it different to the lads. You know, it's totally different how you approach a lesson, how you plan it and what you are going to teach and cover.

**Tommo:** Isn't that going back to adapting your leadership style? Ultimately, yeah I see where the question now. Originally I ...I

**MO:** Maybe I need to re-word the question...

**Tommo:** No, no, no.

**Chris:** Can you repeat the question?

**MO:** It says 'Is this the way you prefer to be treated?' So it comes over a bit you know, 'Do as you would be done by.' So you would tend to say 'Oh, well. Yes.' But when you look at it a bit more deeply perhaps [Tommo: Yeah] .

**Chris:** To be honest, no. The way I expect to be explained to a new junior AB isn't the way I would expect to be explained to me as a Petty Officer. Who's maybe done it for 16 years. I would probably find it very offensive and insulting. You asking me that question has made me think. On the way I might speak to them and in what manner and what way I address them. they may think, 'Yeah, yeah, cheers.' [ironic] You know and it might not be the response you were trying to get but that's made me think that question [...].

**MO:** There you go. What do you think about that [to Jim]?

**Jim:** Yeah, yeah I agree with that. Er..I don't know. I think it must be obviously 'cos we're all in the same mess [senior rate's mess] ...

**Tommo:** I think Chris summed it up perfectly. You've got a set of....ABs...say for shooting [firearms practice] you would talk to them differently than if it was a set of officers....I can't ....again...I....

**MO:** It's interesting one isn't it?

**Chris:** I've been in a position where .....I've had to explain it. Doesn't matter what rank they were...exactly the same to er....in fact to some very senior people in more layman's terms than someone who has been an AB or a Petty Officer 'cos they have functioned on the ..not on the front line but in our environment. Well sometimes they [officers] can be far removed from our environment. And you're saying, 'Look, sir this is how we have to do it.' And I've had the question, 'Why?' Now you often find that comes with rank isn't it? [laughter] 'But why, why? Why are you doing it that way? Why aren't you doing it this way?' The AB just goes 'Let's do

that from A to B.' So he goes A to B doesn't he? Me and you think we're that smart we go , 'Why not involve C and D?' Well why, you're wasting your time, you're only going from A to B. [laughter] You know we ask 'why?' all the time. The Wardroom [officers] asks 'why?' and he's sitting there thinking 'Well there is no reason why.' [laughter] It's like a maths equation 'init? You don't really need to know if you get the answer. It just happens that way, it happens. I wouldn't say you always have to explain in a simpler format just because they are junior in rank like.

**MO:** There is a scenario I just thought of where you are in the sea boat. The Coxswain is the highest rank in the sea boat so it doesn't matter if it's the First Sea Lord who steps into the sea boat the Coxswain is still in charge. So I wonder how you think the Coxswain would play that one?

**Jim:** I've been shouted at before now by a Commodore for getting him wet [laughs].

**MO:** What the Commodore in the boat?

**Jim:** Yeah the Commodore in the boat. He didn't like it.

**MO:** Because you had tried to tell him to do something?

**Jim:** Yeah.

**MO:** And he didn't like it?

**Jim:** No.

**Chris:** In the Royal Navy...you might be the Captain of that minor war vessel or that ship. If the First Sea Lord comes on board, you are not effectively in charge. No much how much special [sea] command you may have been delegated down from the Queen, from the First Sea Lord through QRRNs [Queen's Regulations for the Royal Navy] you are not in command of that....the same if you are the supervisor in the dive boat you may have MCM1 [Commander 1st Mine Countermeasures Squadron] in the boat and you are in charge of supervising and if anything goes wrong..yeah. But you are effectively...because of their rank you are not in charge of that boat. If he was to say, 'Right, I don't think we should dive here, we'll go over there.' Within that you could say 'No. The plan was to do this. We'll stick to the plan.' But if the First Sea Lord goes into a minor war vessel and says, 'I don't think we're going over here today, do you? We're going over there.' And he's 'But we've got our route plan.' 'No, no. I'm overriding it. We're going over there.' He may have that special command, it may be written on a piece of paper but I'm not entirely sure it fits all bills like.

633:58.5 -  
40:35.0

## **TOPIC 3 - FORMAL AND INFORMAL INTERACTION**

### **WHEN IS IT APPROPRIATE TO USE INFORMAL INTERACTION?**

**MO:** OK, we're onto topic 3 now. And now I want to talk about, we have touched on it actually. Formal and informal interaction. So my first question is when is it appropriate to use informal interaction?

**Jim:** On a run ashore [social event], a night out. [agreement]. Social for a football match, playing sports.

**Chris:** On a run ashore, yeah. Again [...]

**Tommo:** It's that line 'innit? That boundary 'cos I don't care what anybody says. If your Captain is ashore and he's in the pub he's [...] and you're not in a work environment, although it's informal you still have that respect don't you?

**Jim:** I think with our generation, yeah but it's like, you know. We used to go out on the town and when we saw naval officers, we'd go. 'All right Boss?' whatever, 'Sir.' when you're on board and the next day it would be: have a laugh and a joke, maybe dit [tell stories] on what had happened but it was always, 'Sir' 'Boss'.

**Chris:** It's been watered down unbelievably over the years.

**Tommo:** But why is that? And is that because ....go right back to beginning [Chris: Right.]

**Jim:** But then it's..you [Chris] mentioned about the junior officers not stamping it out there and then, that's possibly had something to do with it.

**Chris:** I....I....I think its Raleigh [New Entry Training] that's ....the boundaries....I went back to Raleigh and I could not believe the power that we've handed to them [new entrants] not the authority that we should have held. And it was...I dunno...the boundaries have been crossed. They were crossed, they were crossed. 'Alright mate? How are you doing?' I walked into the stores office just the other day and an AB barely looked up from his chair and they're all chatting. And I'm stood there ...see if anybody responded. And he looked up like that [gestures nonchalantly] 'What's up, mate?' And I have never ever used my rank or anything like that but I wouldn't have spoke to another Petty Officer like that, 'What's up, mate?' It was rude and arrogant and I...I shouted at him. I said 'What's up...mate?' I says 'Stand up, get the keys. We're going in here, we're gonna do this.' He couldn't believe my response to him. It was his rudeness to me. I think everybody's gone to the point where it's all about how you look and how you react and who you are. There's never any...for example...men take longer to get dressed....[chuckles]...take longer to get dressed than women. And I'm in the armed forces and I never thought I would say it [laughter] and it is....On our ship there's men with hair driers..and maybe its jealousy on my part [laughter] and it's all so.....and everything is cheek. Instead of saying, 'Yes, I'll go an carry that out.' everything is cheeky and..[Jim: It's gotta be the last word 'innit?'] And they've got to get the last word in. When I went through school, you would have got thumped for that. And that was it. I'm not saying that was right or wrong and it's probably a bad thing. But there was almost a pecking order or a rank structure, that is gone.

**Tommo:** But has that deteriorated over years or has it ...you know...I've been in 12 years, we're not that much different, you've [Chris] what turned 40? I think ...I don't think it would have been that much different when I went through than you went through. But then what is it like now? For people who joined up 5 years ago? Could they turn around now and say...you know...[....] When was that cut off, you know what I mean?

**Jim:** When I was on PO's [Petty Officer's] course in Collingwood [Shore Establishment] when I was er...I can't remember..I was going to say P2 [medical fitness category]....basically all the biffed [medically unfit] killicks

[leading hands] from sea landed shore side as Phase 2 Instructors. And you could see all these kids running them ragged, 'Take me to the town.' Getting them and dropping them off. [...] They're mixing with them in [...] bar in there and you're like 'Hang on mate. When I was killick...you still had a run ashore with the lads, being small ships we were tight knit. But when you were shore-side, there was always that segregation [Chris: It's back to boundaries again 'innit?] It was like the killicks are over there and....there was just nothing it was.....yeah. It's as if the killicks are...a bit of joke now....well..all the ranks now. Guys...I used to fear walking past the senior rates' mess. Someone heckling ya and...but now its just you bimble up..walk through.

**Chris:** Was that right? Was that wrong? You don't know but I definitely think something's been lost and I think we've probably lost the question

....

**MO:** No, no,no you're all right.

**Chris:** What was it?

**MO:** When is it appropriate to use informal interaction? [Chris: Hmmm! Run Ashore] So you're really saying when it's inappropriate or what you think is inappropriate but I think you said runs ashore and sport so is there anything to add to that?

**Jim:** Then there's the incident we had ourselves isn't there? This [...] incident. At the end of the day the informal...informality that someone got told to go and report back on board and it was 'Oh, fuck off! I'm not doing that.' Then that's it. Whereas they should have that respect like, 'The senior rates told me to do that, right. I'm off.'

**Chris:** I think it's lost at senior rates' level. There's a lot of senior rates don't want to be senior rates...ah! not want to be senior rates but don't behave at senior rate level. And a lot of junior officers don't behave at the correct level they should be. And it's getting watered down through informal interaction. Definitely.

**MO:** You think it's definitely got a corrosive side to it?

**Chris:** It has ...yeah...It's a good way to put it, a corrosive side. It can. But then there is a time ....when informal interaction can work positively. For example, I could go down the back end [stern] with four lads, they're sitting there having a cigarette. 'Right lads, I know you don't wanna do this but...Right, Smudge, what I need you to do ....Do this, do that.' There's a formal bit about it but you're doing it in an informal fashion. I.e...calling them by their....it's not 'AB Brown, you've got to do this.' I'm not fan of that. I don't think...I'm not a formal person at least...you don't have to call me PO, Petty Officer, or whoever. They don't have to do that as long as they understand the boundaries if the rank structure which is I'm still telling them what to do and I'm in charge. You know. I don't mind if they use my name as long as they go through the motions as long as they work. And in that informal way it works. But the day that breaks down you have to go back to the default setting and become formal again.

740:25.9 -  
45:06.0

**SHOULD LEADERS MAINTAIN A DISTANCE BETWEEN  
THEMSELVES AND THEIR FOLLOWERS?**

**MO:** Right, my next question leads on from that really, which is should leaders maintain a distance between themselves and their followers?

**Jim:** Very hard....well not all the time but.....they should have time away. Er...Sandowns [Sandown Class] I noticed when I came over to Sandowns as a killick. On a Hunt [Hunt Class] you had a leading hands' mess [accommodation area] which gave them that time away. Not all the time... its good to have that...contact but like...er...we're grown-ups. We don't do Evening Rounds [inspections] on Hunts as a killick but on Sandowns you're thrown in, everybody's all mixed up in a pot mess and its er....the leading hands are just like a senior AB really. That's the way unless someone really shines and stands out .....

**MO:** Anybody else?

**Chris:** No. There's a boundary. But not distance. If you have a total distance from them, you could sever the connection of the respect or [Chris: Do we not....] If they never see me...if they never see me as their leader .....

**Tommo:** Do we not do that inadvertently though? Junior rates' mess, senior rates' mess, wardroom. You've got upper management level, middle management level and...and you've got your ABs, so are you not doing that? Senior rates are distancing themselves from the ABs 'cos they are in a different mess. We talked about this before. [pause] I always wanted to get in that senior rates' mess because things like they don't have rounds, you can have a glass of wine with your tea if you wanted it. Should that not be an ....aspiration to get there? And therefore that's why we distance ourselves via messdecks?

**Chris:** I...I think there's people who haven't managed to do that though. Although they've been put in that mess. They might eat in our mess but they have never distanced themselves or removed themselves physically from that mess, the forward mess [junior rates' mess].

**Tommo:** You will...you will always get that...

**Chris:** In that distance are you talking 'I'm petty officer, you leading hand and that is how we are going to stay.' Formal all the time. I think that if you are like that you will fail to function as a team. Like they advertise in the Navy [The Team Works]. If you are like that you will never function as a team. You have to amalgamate formal and informal to function as a team Otherwise it's never ever ever going to work. Distance? You need it but within the scope of....again the boundaries have gotta be flexible. Constantly maintaining all the time. 'Right. We're tailing off a bit here, so we come back a bit more formal.' Get them functioning again. 'Right. Everyone's functioning again. Its working well, as a team. We're doing well, we can relax the formalities a bit.' You know, let's get....'cos you can really finish off a team by being informal i.e. bring it just that that little bit closer and more functioning and driving it than being ...you know..if you're leaving the room, they're talking about you.

**Tommo:** We work in a completely different environment though don't we? [Chris: Thank a bigger ship?] Not even that. If you look to a big company in civvie street, their MD will probably walk down onto the factory floor once a week. Whereas we would go to sea and be in this little..tin can for two weeks in each other's pockets....

**Jim:** And still not see the Skipper for a week [laughter].

**Tommo:** Well yes [laughs], yes I suppose, yeah.

**Chris:** [Raises voice] And I don't think that's good 'cos if you're in the junior rates' mess and the Captain's kept his distance and you're like 'Where's the Boss then?' 'Who is the Boss?' He's never seen on 2 deck and you have that negativity from too much distance as well. So you need to find the balance.

**Tommo:** Yep. I totally agree because you will see...a good leader will...For instance, the Captain will make a point of going on 2 deck possibly once a day or something like that. He may [...] he may have that intent but he will still go down on 2 deck and interact.

**Chris:** And again that can have a negative effect that the middle management may think he is interacting with them too much and it may have a negative effect on the middle management. I.e. AB Bloggs over there knows about it before the MEO [Marine Engineering Officer]. And that has a negative....it...it...it ...definitely formal and informal....back to the question is a balance like...it's a definite balance. However..you need to see to it, I think.

844:24.3 -  
53:49.5

**THINKING OF FORMAL INTERACTION, SUCH AS BROADCASTS AND WRITTEN ORDERS, WHAT IS THE VALUE OF THIS KIND OF INTERACTION?**

**MO:** Right, thank you very much, we're going to come back to that distance thing anyway. So...I'm going to go to like, really formal interaction. Now I am thinking of written orders, broadcasts, one way transmissions. So it's not really *inter*-action, it's really 'You will do this.' Daily Orders, for example. What, do you think, is the value of that kind of interaction?

**Tommo:** Goal. If you have a...if you have an aim i.e. a Command Aim you know like a speed of 6 knots. The ME [Marine Engineering] Department know they have to provide a main engine up to 6 knots. Its...its...having that goal so we know what we should be achieving.

**Chris:** I...er....agree....but ....I....to be honest with you, in 15 years in the Royal Navy it didn't matter what the Skipper put on a blooming board. [...] an aim and goal. The aim of the Ship is....to carry out route survey up to 12 knots. You know...I also have my individual...[Tommo: That's a good aim that one! [laughter]]....do you know? [laughter] I believe or disbelieve in it. It clearly has some effect on someone but I can pretty much guarantee that not one person really in my environment play lip service to that. The MEO [Marine Engineering Officer] might. That he has to provide two engines up to 12 knots. But within that there's that little bit that you do. 'OK, I'm in charge of the...gunners.' So within that aim that he puts out you have your tiny little bit in there. Maybe that is the goal but I sit there and think...I don't know....it means absolutely nothing to me. It's my own personal pride and I want to provide the service in my job for them to achieve....the long term goal if you know what I mean? The minute by minute is .....I don't know....

**MO:** Jim, you look like you want to say something.

**Jim:** No, no, I was just thinking [...]What is happening? Look at the board

and go, 'Command Aim...' Daily Orders, I just look at 'em. They don't sink in, I'm like...'Where do I need to be? Oh I need to be there for that brief. Then I can go and do what I do...what I need....'

**Chris:** You come back to default settings. Individuals...your individual goal.

**Jim:** It's like defence watches [6 hours on watch, 6 off]. 2 weeks. I know for a fact I'm sat on a set [sonar display] for 6 hours. And then I'll do some off-watch phys [exercise] and then get in it [bed] and that's it for 2 weeks. You plan your own agenda around things. You think 'What training do I need to achieve for the guys?' What do you need to achieve work wise.

**Chris:** Now in the battle damage assessment or during the fire-fighting ...now the Command Aim is important then. 'Cos it'll switch to 'The Command Aim is to account for personnel.' 'The Command Aim is to put out the fire in....' Now that to me is a more functioning, more robust, more ah...it's immediate [clicks fingers], 'This needs to happen now.' [clicks fingers], 'This needs to happen now.' But when it's over a 2 week period, 'The Command Aim is to do route survey.' You ask all the ABs in the mess, all the leading hands, they would not be able to tell you the Command Aim. Or they wouldn't care. They're getting paid to function and that's what they'll do.

**Tommo:** But isn't that why it's called a Command Aim? Not...

**Chris:** It's the CO's [Commanding Officer] aim.

**MO:** Because it's his aim?

**Chris and Tommo:** Yeah.

**MO:** [laughs] Good point.

**Chris:** The AB's aim is to work to the leading hand and clean 2 deck.

**Tommo:** Keep him happy.

**Chris:** Each person, each individual, go back, has his own Command Aim. Whether it's the AB or the leading hand...

**MO:** I never really thought of it in that way so....I'll try to bear that in mind. If we take that aside then, because you said that works in some instances and not others. So in terms of the more long term aims, in terms of formal interaction, how then do you know or do you know what the CO's long term aims and objectives might be?

**Chris:** There's a CTM [Captain's Temporary Memoranda] out, CO's aims and objectives.

**Jim:** It's quite easy for us 'innit? The cycles we work in now: [...]work up, OST [Operational Sea Training], deployment, regenerate...go again. So...and like he say's the aims are in a temporary CTM.

**Chris:** I think it would be beneficial...[...] If what you are saying in a written format, he was basically explaining it. 'The reason why I am aiming for this.' Put it down on a piece of paper which in my experience, people very rarely read a CTM or XTM [Executive Officer's Temporary Memoranda] so they never get past the first....I mean let's face it...a job interview: you put your CV in for a job, it will barely get past the first....unless you do something to make it attractive.

**Jim:** They're not even published in the messes anymore...

**Chris:** The First Sea Lord visiting on Thursday. 'The First Sea Lord's



visiting on Thursday, I'll polish my shoes.' And that is it, they don't look at anything else...It takes the middle management to go 'round and say 'Right, you need to be here, he's here and you need to be here.' 'Cos....I don't know...possibly 5% of the people? 5%? Yeah....and I put myself in that position that ...the only reason...because my role now is the reason I actually read them.

**MO:** OK. Anything....So you're saying really, you all mentioned CTMs, XTMs, are you saying that is a limited .....[Chris: very limited] ...do you think face to face is the way ahead?

**Tommo:** Yeah, we're going back to the formal part of it. But that should be evening rounds shouldn't it?

**Jim:** But we used to have..you see that's CUMDAFFER [Clean Up MessDecks And Flats For Evening Rounds] its changed now to afternoon rounds. Which....yeah, it's good. The Jimmy [Executive Officer] he'd come in, he'd make a sitrep [Situation Report] pipe [broadcast] and everyone...[Chris: That works. Tommo: It does.] and it would get everyone [Tommo: But...] no...no..I'm just saying over the various units that I've been with...not every ship does it. And that's something that...we know what's happening, we know where we're gonna be. Get up in the morning and make a sitrep pipe...

**Tommo:** Exactly, that is a key fundamental....I....[Chris: Well it's a learning media isn't it?] Yeah...I would fully expect that when we go operational that the Jimmy will making pipes every night saying, 'Right lads, we've had a good day today..'

**Chris:** But he won't be, we'll be in Bahrain, we'll be EMCON [Emission Control] Silent. People will be listening so you don't put anything out over main broadcast. 'cos people are listening unless you are out in the middle of the ocean and no-one can hear you.

**Jim:** Like they used to come in the mess didn't they? And all the lads....

**Chris:** That's what evening rounds is all about isn't it? You have a free drip sess [complaint session] a great feed straight into the Command and the Captain. 'Cos that XO should take it straight to the Captain, 'This is what happening on 2 deck.'

**Tommo:** Going back to that the XO should be disseminating his ...aims of say..tomorrow. OK, it's not in a formal manner but it should be said on that pipe.

**Chris:** It comes back ...it's why the teacher stands at the front and gives you a power point lesson and also reads it out, so you're taking it in through your ear and through your eye...you know and verbally and you're getting the ..you know...and they ask you to write it down as well, so you're getting it in 3 ways and you're learning it. If they just put out communication on a piece of paper ....[seagull cry] what's happening? I forgot now...if you put out a piece of paper then you also tell me about it, 'Oh, have you took a note of that?' You know , 'Write that one down, you wanna write this down.' You know...I dunno...I've done it for appointments now, I put my notices on the notice board and I go round and I tell everyone an' all. And I make them write down their own appointments. So if they've took it in 3 ways, hopefully they won't forget it. If I just out a note on the board, I guarantee 50% of 'em will miss their appointment. It works

but you need to support it by other means.

**MO:** Yeah, OK that's very good. OK I'm pretty much getting to the end.  
[Chris: Can I have a glass of water?] Of course you can, yeah. [Chris: I'm gobbing off too much.] Does anyone else want a glass of water? [Jim: No, I'm fine thanks.] I'll just pause that for a sec. [Pause]. Right so, I think we're actually, I'm happy with that question 'cos we've covered that in the round anyway.

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1:06:40.8

## **ENDING QUESTIONS**

### **WHAT ADVICE WOULD YOU GIVE TO A JUNIOR COMMAND TEAM?**

**MO:** So these are really just ending questions just to sort of wind it down. Erm....so if you were hypothetically the 3 of you were recruited to help FOST [Flag Officer Sea Training] to help train a junior Command Team. So the Captain, First Lieutenant [Executive Officer], Navs [Navigating Officer], YOs [Young Officers] and you were assigned to them to provide them with advice erm...what sort of advice would you give them? You could freely give them advice and then go home again, so you are not a part of that team. What guidance would you give?

**Jim:** Try and keep a calm head. Definitely [...] don't flap [panic] [laughter]

**Chris:** The moment you start flapping....

**Jim:** You've lost control.

**Chris:** You've lost control. And I can guarantee if you're down looking up .....isn't it?

**Jim:** Yeah, 'He doesn't know what he's on about it, he's flapping.'

**Chris:** And you portray a level of calmness again erm...if you're cool, calm and collected. And you're using different media to get your point across. Instead of just sending out Daily Orders and believing everyone's gonna be there at the set time. I think we often train wrong, we go straight into an exercise to prove where everyone can go wrong...you know...and we find out...right..and I think we debrief wrong as well. We're often using the old bath tub effect, negative, positive, negative....and I hope we should have moved on from that.

**MO:** What do you think we should be doing?

**Chris:** Well we took on Lymptstone's [Royal Marines Training Establishment] role at Defence Diving School and its the coaching and mentoring effect and I believe we should move that way. But in the military, we don't always have time to coach and mentor all the time. But in a training environment we should certainly be going for that. In my last OST [Operational Sea Training] I think they were debriefing not particularly well. In that...they give you a list of 10 things, 'Right, Petty Officer such-and-such you did this, you did this, you did this.' That's 10 things you've got to remember . So 'Explain to me where you went wrong?' 'Well, I missed up this bit and this bit.' You know, he proved he knows 5 things that he messed up. That's great so you only have to know 5 things instead of having to remember all 10. [Tommo: Identifying your faults] Its a different bit of media again. He used his own brain to work

out where he went wrong and then you're just adding that little bit. And I would advise...we do go through talk through of things, table top tactics, should be used more often instead of, 'Let's do a FIREX [fire exercise] to show 6 of them blokes where they will get it wrong.' Why not, let's take them 3 hours, do a walk through, talk through. Each person's got his training.....bring it in, 'Right this is where you wanna be, this is what you wanna be doing.' And then 2 weeks later...have the fire exercise or have another table top tactic and make sure they've remembered it and then have the fire exercise instead of....we are....I dunno.

**Tommo:** We're set in our ways.[Chris: We are.] And un...unfortunately that's the way the Navy is. You do a fire exercise, you might table-top it for an hour before an OST....

**Chris:** You've got a list of pick-ups, you've gotta remember them all. [Tommo: Yeah.] for the next time.

**Tommo:** You're right, what you say. If you adapt that different way of training i.e. have a walk through first. You go 'Right! We're gonna smash that in 2 weeks.' And crack on.

**MO:** OK, but in terms of ...sort of ...giving.....It's my fault because I have introduced the sea training element but I just meant, you know, as a *trainer* for a junior Command Team, what advice would you give them, not just in a FOST scenario although it does apply. I mean just in general what would say.....

**Tommo:** Interaction, you know, we've talked in terms of finding the balance of [pause] the Captain going down to 2 deck to interact with everybody else however, finding it in a formal and an informal manner. So being able to...as a Command Team...being able to interact with your guys but still be able to step back so, 'No that's wrong and this is the way I want you to do it.'

**Chris:** Doesn't it just come under the umbrella of your communication [Tommo: Yeah.] As in...getting your aims and objectives over in a fashion that suits. [pause] I know the Captain on an aircraft carrier can't do that for 1200 people but you need a clear line to each person and...formally, informally through written orders, through verbal orders, through communication face to face. Er...it's tailoring it..through individuals or team and disseminating that way 'innit? They've all got to come under the umbrella of being a good communicator.

**Tommo:** Is...is...is that not the ethos of the Navy, this C2DRLL? [Courage, Commitment, Respect for others, Discipline, Intergrity, Loyalty] Could you not just turn round to the Command Team and say, 'There you go.'

**MO:** If only it were that simple, eh? [laughter]

**Tommo:** If only..but...that is what we are...

**Chris:** The only people who know their C2DRIL are people who have been through Collingwood [training establishment] or new joiners. I didn't know C2DRIL till I got in this role now and I had to put posters out around the Ship and that.

**Tommo:** But overall that is the ethos isn't it?

**Chris:** That C2DRIL should come naturally to any person... bloke who wants to be a leader. It should be personal pride and to me that C2DRIL

should ...we shouldn't have to put that on paper for each person to have that. Loyalty...

**Jim:** It should just come naturally.

**Tommo:** Although it may not...if you had to give advice to a Command Team....there you go. And you won't go far wrong.

**Jim:** [...] We seem to pick the wrong people sometimes, we promote our er...burdens as such..you know...better to get rid.

**Chris:** Sometimes it's easier to get rid of them by promoting 'em isn't it? But then its potential sometimes, if someone..he isn't a great killick, he might make a good petty officer. And its an odd thing

**Tommo:** He might interact better in the junior rates' mess..

**Chris:** Exactly and he might interact very well and we have often done that...try to get rid of it and we might live the ...'Oh, he's not providing a good service is he? Give him a half decent write up and we'll get him promoted. He'll be off the Ship in a month.' You know...and...and...and it's happened. We're our own worst enemies really. Someone's wrote these people up to be in that position.

**MO:** I'm still waiting for that to happen to me [laughter].

## SUMMARY

**MO:** Right OK, what I would like to do now is to summarise what you said so you can tell me if I have got it wrong...er...then I have just one short question at the end and that's pretty much it. Erm...so...erm...basically when we talked about interaction in the start...I own't go through the whole thing, I'll just summarise it. But when we started talking about interaction you said, I think, that interaction was good but within certain limits, not too much familiarity and you said that it could lead to problems if you do that. And you all felt that interaction affects performance and positive interaction affects performance positively erm...[Chris: And negative can....] yeah, negative can ...[Chris: It can go the other way.] yeah...it can work the other way. You gave me examples ...won't go into those. You told me how you interact with people, your subordinates by basically by showing them the way by your own standards of fitness or bearing. That you can do the job that you are asking them to do. We had quite an interesting chat about whether you too would like to be treated....so that was quite an interesting question. We spoke about informal interaction and is it appropriate and I think you said sports and going ashore, that would be....and even then within specific limits. Erm....we discussed the merits of distance and we discussed the merits or otherwise of written orders, CTMs, XTMs, pipes and all that sort of stuff. You said how you were made aware of it [CO's aims] and we talked a little bit about the Captain walking around and talking to people and the XO doing evening rounds to back up the formal stuff. Erm....and we just did that bit there about sea training and not flapping being a good one. But, yeah and also the C2DRIL one, being quite an interesting one to discuss. Erm...that's pretty much what I saw, obviously there will be more on the tape in terms of details. Have I got that roughly right? Got the flavour of it?

**Chris:** Yeah.

## **ADVICE FROM THE PARTICIPANTS**

**MO:** My last question then really. This is quite a long project, this is project 1 of 3 projects. I'm going to go on and form a questionnaire based on this sort of thing that you have given me here on positive dimensions of interaction. I am going to go on ships doing OST and I am going to ask people if they are interacting with certain people in a certain way, based on the trends from this research. And I am going to form socio-metric diagrams, that is form diagrams of how people on ships interact with each other and we are going to compare that with performance. Hopefully, I'll be able to use...

**Chris:** You'll produce that again? With the performance on OST i.e. a SAT [satisfactory] or a VSAT [very satisfactory]?

**MO:** Yeah, so does a more interactive team get a VSAT at the SALVEX [Salvage Exercise] but only just a Just SAT[just satisfactory] on the GUNEX [gunnery exercise] or something? So what's going on there? Try and find those sort of trends and hopefully form the tools.....You know when the OSTies come on board and they get a feel for a ship don't they? 'Yeah, that ship's alright, the ME [Marine Engineering] Department are pretty good but they don't talk to anybody else.' That sort of thing. I want to do that scientifically because a gut feel is all very well and 9 times out of 10 it's right. [Chris: yeah] It's also subject to bias aswell, so they might have come off a ship where they've had a similar problem and they go, 'A-ha! It's the same problem.' But it might not be. So hopefully with this more scientific....that's what I am hoping: to develop the tools.

**Jim:** Are you going to try that with the Conniston Crew [Spare Mine-Countermeasures Crew] , being shore-side [not on a ship] that's gonna have an impact on how they inter-react.

**MO:** My research won't take account of that at the moment. But its a good point because maybe I want to do that. The problem with that is that I don't really have anything to compare them with performance wise. It's quite hard isn't it? On Conniston Crew?

**Jim:** I noticed when I was shore-side for a while, the lads are going to their homes on a night, it's just like a hotel 'innit? [...]

**MO:** It's a really good idea because if I go and do the same sort of analysis I think there will be a big difference because of that, so you can actually work out what the environmental, cultural effects are...

**Tommo:** I think that's a big problem in the Navy as we see it now. Because when you joined up you were in a mess [accommodation by ranks]. You got that camaraderie, you got that feeling of togetherness didn't you? But now...

**Chris:** The information got passed didn't it?

**Tommo:** But now...[...] No...no...maybe this is old style..not old style but we need to embrace the change. I.e. Type 45 [New RN destroyer], the junior rates get a 6 berth cabin, they don't get that vital.[...] d'ya know what I mean?

**Chris:** I was in HMS Endurance [Antarctic Survey Vessel with similar

accommodation arrangements] and there wasn't a better junior rates mess I've been in. And everyone went into the mess to socialise and you also had a 3 man cabin to go back to so....I've seen it. But in shore bases everyone goes back to their cabins, you never see anybody. But HMS Endurance in a 3 man cabin, we all socialised really well. [Pause]

**MO:** Right OK. What I was going to ask was: is there anything you think I have missed in my line of questioning, is there anything I should ask incorporate for the future?

**Chris:** That depends on...on...on the end goal....

**MO:** The end goal [...] my goal is to find out how leadership really works. So rather than read a book about say, action centred leadership. What I actually want to do is to go and ask either the recipients of or you know...or the dealers in or both..and find out what they think...so I'm asking about leadership, I'm asking about interaction with leaders, so my question to you is: do you think my questions there have captured it? Or is there something I can add to it, is there a dimension that I missed?

**Chris:** I....I felt that your questions was going for [...] it was very much centred around interaction.[MO: It is...it is] So..no....if that is was what focus was then no I can't think of anything.

**MO:** OK, I cannot spread it out because I am doing a doctorate and you have to concentrate on this much of a subject, because you can't...you can't it's the detail they are looking for so....

**Chris:** Well no, in that case you could go off the and no doubt in some of our questions we went off on a tangent...

**MO:** No, that's OK, that's alright because those digressions can be important because people talk about things that are important to them, so if you start off with subject A, but subject B is on your mind and you come in with subject B, well that's actually useful for me because maybe I am on the wrong subject, maybe I should be concentrating on subject B.

[Pause] Right OK, I'll switch it off...oh, you've broke the record, we've gone over an hour.

## INTERACT FOCUS GROUP S3 – TRANSCRIPT

DATE 26 June 2012

VENUE HMNB Clyde Maritime Operations Centre - Room 220

### PARTICIPANTS

Name	Gender	Age	Consent
Ski	M	41	√
Eddie	M	37	√

	Timespan	Content
1	0:00.0 - 1:03.7	<p><b>OPENING QUESTIONS</b></p> <p><b>INTRODUCTIONS</b></p> <p><b>MO:</b> Yep, that should be us recording and the good news is my battery is full so...I should have checked that before. So OK...my opening question and this is purely to break the ice erm...it's just to tell me your name, how old you are and how long you have been on the Ship and the purpose of that is just to get your accent down on there so that when you speak again, I'll know who is speaking, so I'll start with yourself.</p> <p><b>Ski:</b> I am Ski, 41 years old and I have been on the Ship 3 year.</p> <p><b>Eddie:</b> Eddie, I've been on the Ship for...just under 2 years...erm...what was the other thing, sorry?</p> <p><b>MO:</b> Age.</p> <p><b>Eddie:</b> Age, yeah. 37.</p> <p><b>MO:</b> 37 OK, well we'll just use your nicknames, so I'll take your full names off the transcript. OK, so that's the first one. That's supposed to take 5 minutes but obviously it doesn't take that long with just the two of you.</p>
2	1:03.6 - 3:54.5	<p><b>INTRODUCTORY QUESTIONS</b></p> <p><b>THE FIRST THING YOU THINK OF ABOUT INTERACTION</b></p> <p><b>MO:</b> My introductory question then and this is just to get us thinking about the subject erm...what is the first thing that comes into mind when you think about interaction between leaders and followers?</p> <p><b>Eddie:</b> Erm.....[pause] [laughs]</p> <p><b>Ski:</b> Er....sort of like 2 distinct groups really isn't it? Separates because leaders in one group, followers in another group...[pause]</p> <p><b>MO:</b> OK that sounds like there isn't any interaction so what do you</p>

		<p>think about when there is interaction between those groups?</p> <p><b>Ski:</b> Erm...yeah...sometimes there is an initial coming together in groups, breaking down of the barriers, the [...] leaders are the leaders...</p> <p><b>MO:</b> OK. That's interesting. Any thoughts on that?</p> <p><b>Eddie:</b> Depends whether they are strong leaders or weak leaders I mean that's the first point. If they are a strong leader then you'll always find that they will be leaders throughout anything but then if they are weak leaders then you will tend to find people might pick up on them being weak leaders and take over and sort of....</p> <p><b>MO:</b> OK, yeah. So when you define a ....er....how would you define a strong leader versus a weak leader? What would be the differences between the 2?</p> <p><b>Eddie:</b> Erm...a few things. Er...confidence is probably one of the main things. If you're strong, if you're confident. People are going to sit back straight away and say, 'Ok, he's confident and strong.' Whereas if it's the other way around then they'll maybe sort of, run over him a little bit.</p> <p><b>Ski:</b> It's respect and position [Eddie: Respect, yeah.] Others appreciate that they are the leader and above you in the peer group, so to say, so you do as they say. You have the respect for them, don't try to cross any...boundaries unwillingly or probe across those boundaries. Whereas a weak leader, you could probably probe, see what you could get away with.</p> <p><b>MO:</b> Yeah. [long pause]</p> <p><b>Eddie:</b> I always find strong leaders tend to interact with their peers, if you like, than weak leaders.</p> <p><b>Ski:</b> They've got the confidence to say, 'I'm the leader, I'm in charge.' Yeah...be relaxed but be formal at the same time, you know? So..presence so..knowing, 'I'm in charge, but let's have a chat.'</p> <p><b>MO:</b> OK, that's interesting. Well, you've been very forthcoming and some interesting points there, so we'll probably come back to a lot of those, to be honest.</p>
3	3:54.5 - 9:29.0	<p><b>TOPIC 1 - HOW DOES INTERACTION AFFECT PERFORMANCE?</b></p> <p><b>DOES INTERACTION AFFECT PERFORMANCE?</b></p> <p><b>MO:</b> But I am going to go on to my first topic now...erm...and that is the topic question is how does interaction affect performance and the first question in that topic is just to ask do think interact <i>does</i> affect performance?</p> <p><b>Ski:</b> I think it <i>can</i> affect it because if you've got a good leader that you...probably quite inspires you, he pitches up and you're like 'Ah, it's the Boss.' And he's 'Ah, how's it going, team?' You don't want a Boss like 'Oh, it's him.' Bomb burst [laughter].</p> <p><b>MO:</b> Right OK. Do you think that affects performance? Because</p>



what you described there was almost like a comfort thing, you are comfortable with a leader [Ski: Uh-huh.] Is that important for performance though as well?

**Eddie:** Performance of the leader or the team?

**MO:** The team.

**Eddie:** Yeah, definitely..I would say...

**Ski:** Mmmm..you could probably have a bad leader but still have a good team [Eddie: Oh, yeah, yeah, yeah] possibly carrying the leader who's been put there simply by position or rank and you'll have a good team that'll carry him. You know it maybe navy terminology but a CO [Commanding Officer], a weak Captain but a really really, really strong XO or possibly he's got a really good team below him. If he's got a poor team then it goes all the way up the chain.

**Eddie:** I suppose it could go...also along the lines of that...if the leader actually wants to be there. If he's in a job where he doesn't wanna be there or a position in the mob [navy] he'll be like, 'I'm not really...' He doesn't really want to interact with people 'cos he doesn't wanna be there. I've had that in the past, I've experienced that.

**MO:** So what do you think is going on in that scenario then? why would a leader not want to be there do you think?

**Eddie:** Just...well...getting drafts [assignments] and all that [...] He doesn't want [...] There is a lot of people who don't wanna be here....

**MO:** And can that affect performance?

**Eddie:** Yeah, yeah.....[pause] Although those people will still put their hearts into it. It can still be a bit like [...]They do the minimum to get by, if you like. Whereas if they are in a draft they wanted they like excel a bit better and that can kinda effect on others [...]

**MO:** Right, OK. Thanks for that. That was...I think you both said interaction does affect performance to some extent [Both: yeah, yeah.]

## **HOW DOES INTERACTION AFFECT PERFORMANCE?**

**MO:** OK so my next question is how does it affect performance. I mean what is the mechanism by which and act...act...actually this doesn't just have to be with a leader it could be within the team itself. How do you think it affects performance?

**Ski:** I've heard...It probably depends on how good the team is as well. A good team....will crack on...the leader probably doesn't have to interact as much because he's probably got the confidence of that team. Whereas if he doesn't have the confidence then he'll have more interaction with his ....he's got to check on them, 'Are you doing this?...are you doing this?' 'Or are you not doing this?' Whereas if he knows his doing it, the team are doing it. You'll probably get that little bit less interaction.

**MO:** Right OK, yeah

		<p><b>Eddie:</b> Yeah ...almost the same really. I mean I...</p> <p><b>Ski:</b> I think alternately you get your micro-manager as well who doesn't trust his team [Eddie: Yeah, exactly]. He's supposed to sit there and his team are supposed to take the work load for him. But you get the odd one who doesn't trust his team He's in there constantly. I think that decreases peoples' morale a bit , when they are, 'Does this man not trust me? I'm doing all this, I am proving that I am doing all this.' Yeah, yeah, OK?</p> <p><b>MO:</b> What do think is going on there?</p> <p><b>Ski:</b> I think it is a lack of trust. Er..on the leader's side. Rather than say, 'This is my team, they'll cover me.' You know, 'I've got full confidence, if they've got a problem, they'll come and see me.' No, this is one who doesn't trust his team.</p> <p><b>MO:</b> And if he doesn't trust his team, what effect do you think that has?</p> <p><b>Ski:</b> Poorer [Eddie: poorer] morale. Poorer confidence in their command, he may be a brilliant leader but he disnae trust us.</p> <p><b>Eddie:</b> Then there is no interaction is there? [Ski: No, no.] The lads working under him are going to be 'We're not bothered if he's.....'</p> <p>[Pause]</p> <p><b>MO:</b> Are you saying they will stand back?</p> <p><b>Eddie:</b> Yeah. Yeah, I think so.</p> <p><b>Ski:</b> Er...yeah ....probably the biggest thing is the decrease in confidence, 'He doesn't trust me, well I'll do my best but I'm just not trusted.'</p> <p><b>MO:</b> Have either of you been in that position yourselves?</p> <p><b>Eddie:</b> Not trusted, you mean? Yeah.</p> <p><b>MO:</b> Yeah. You don't need to go into specifics or anything, but how did you react at the time?</p> <p><b>Eddie:</b> At the time it sort of [...] your morale, you're like, 'why should I bother? If I'm not trusted to do something, why should I do it?'</p> <p><b>Ski:</b> 'What can I do to prove to this guy that I can do this, I am obviously not in his circle of trust. What can I do to prove I am doing the job? Why doesn't he trust me enough?'</p> <p><b>MO:</b> Thanks for that, I might j-u-s-t come back to that later. Maybe after.</p>
4	9:21.4 - 24:18.0	<p><b>TOPIC 2 - WHAT CONSTITUTES GOOD OR BAD INTERACTION?</b></p> <p><b>EXAMPLES OF POSITIVE INTERACTION</b></p> <p><b>MO:</b>OK erm....my second topic then is what constitutes good or bad interaction and the first way I want to break in this subject is to get you to think of an instance of positive interaction that you've had in the past and how you benefitted from it so if you can give me an example. Again, I don't need specifics but if you can give me an example of good interaction and how it made you feel. [pause]</p> <p><b>Eddie:</b> I....I.....I tend to find if you've got a leader above you and he</p>

gives you stuff to do and all that. You do it, you're happy and then along with all that comes the old, 'Right we'll go on a run ashore [social event] or we'll go and have football one day or....we'll go and do stuff.' It's always good for a leader to give people goals and future and...do stuff. I mean it's not as if 'Right you do this and we'll do that. If you don't do this, you're not doing that.' It's 'Right, get all this done and we'll go out we'll do such and such.' I tend to find that always works to be honest. Give someone something to focus on in the future and it sort of helps people along. I tend to find that that works.

**MO:** And you've obviously had experience of that, can you give me a sort of specific instance, I mean I don't need the detail, if you know what I mean, but er...

**Eddie:** Erm. Well not really. When I was working shore-side [not on a vessel] for a few months and it was sort of. ...Well we've got a lot of work on in a short period....to be done...a lot of generator changes, whatever, and time was tight, we needed to get it done. Well at the end of that ...that lull, 'We'll go for a run ashore on Friday. We'll book AT [Adventurous Training] one week.' Everyone would put a lot of hours in that week, obviously, otherwise it goes to the other shift. And having that focus of something to do, gives you a bit of momentum if you like. Although you got the time back, it was that extra incentive to get something else.

**MO:** How about you, Ski, do you...have you had an example or what did you think about that particular example?

**Ski:** Erm..what was ours again? Like initially setting up...like a joining interview or something like that. Something where you set up the boundaries, set up the guidelines, the direction. For instance...er....I joined the Ship and the XO [Executive Officer] ..he was my DO [Divisional Officer] so he sat down and said 'You're the DWEO [Deputy Weapon Engineering Officer] now, your predecessor wasn't up to the mustard. I don't want you to be like him and I will come down like a ton o' bricks. Alternatively, if you've got any problems the door is always open, if you can't sort it out, come and talk to me, we can sort it out together.'

**MO:** OK...and. that was...that was obviously a good example?

**Ski:** U-huh. The door's always open. It's not closed.

**MO:** So which bit of that did you react to the most positively? The ...sort of..there was a warning and also....

**Ski:** Probably both of them. It was to say, 'Look, muck me about and I will come down on you. However, you're having a snag? The door's there; I'll help ya.'

**MO:**OK, yeah. OK.

**Eddie:** I tend to find that you get quite a lot of that on the small ships. The XOs or the Captains...most of them, I would say, that I've had on the 8 years I've had on them...the door's always open. Whereas...previous..on big ships it's ...you don't really get that as much I know there's a lot more [...] but just to even give you that comfort when you join would help you I think.

**MO:** Do you think, it sounds like there is less distance on small

ships?

**Eddie:** Yeah, definitely. I definitely think so. Although you still know where the mark is, obviously. But 'the door is always open' is always a good thing.

**Ski:** Alternatively, I had a CO [Commanding Officer] who didn't say that 'till he left [laughter]. 'My door is always open.' 'Could you have told us this earlier?' [laughter] Always er....he was a good CO but he maintained an isolated distance from the rest of the crew. But he had a very strong XO hmmm.

**MO:** So do you think that worked in combination specifically?

**Ski:** Ermmmm....it sort of isolated him from the crew in a negative way, you know. 'Oh it's the old man [Captain] .' Whereas you get others where their door is always open. You'll see them on 2 deck and you won't think 'Oh, God! It's the CO.' He's down their just touring the estate.

**Eddie:** I think you need that ...you need that. For your Captains and XO's to be down on 2 deck. [...]

**Ski:** If it doesn't happen, when you do see him, you do think, 'Oh, God! What's he after? I'll just duck into this toilet out of the way' [laughs]

**Eddie:** And he must think that as well, 'Oh, 2 deck. There's no-one here.'

**MO:** He'd probably wonder why it was always quiet.

**Ski:** Well that's like a poorer leader or maybe...too disciplined. Whereas if you've got one where people are like, 'Ah, it's the Boss. He's come down.' Kinda thing. Even it's just a 'Alright guys? How youse doing?' 'Morning, Sir. Out last night?' Kinda thing.

## **HOW DO YOU TRY TO INTERACT WITH SUBORDINATES POSITIVELY?**

**MO:** OK, right thank you very much. And how do you personally try to interact with your subordinates positively?

**Ski:** Try to meet them on their level, you know. Try not to say, like. 'I'm the Chief, you're the Indian.' Just be the Indians together kinda thing. Out with the sorta...sorta rank structure kinda thing, chat about things *they* want to chat about.

**MO:** OK.

**Eddie:** The big thing I always go for is the old cleaning, right? It's always, alright, the younger lads that do the cleaning, the ABs [Able Seamen] and that..whatever, especially in the small ships. And normally when my lads are turned to [working] I'll chip and I'll do just as much as them because I feel that we're all humans at the end of the day, why should they only clean? I know I did it..but I still like to put my hand in and stuff [...] and help them along. And that way you tend to find that you....Because the morale in cleaning is always low isn't it? No-one likes doing it but it's got to be done. And the simple thing of just going and helping them, they're thinking 'Well if he's doing it, we'll get on with it.' You know?

**Ski:** Talking to them....using their name, their nick-name instead of AB So-and-so.

**Eddie:** But that can be bad in a respect, you know. 'Cos you can get some people too friendly and then it's a harder job for the Coxswain or the XO sometimes because...There's a fine-line between having these [...] and having that. 'Well I'm a senior rate, he's a junior rate.'

**Ski:** I know my first Coxswain when I was a killick [Leading Hand] when I first joined and he said, 'Right, right now I'm Alex but when there are officers around or senior rates I'm Coxswain. But privately it was that, 'Call me Alex or 'Swain'. Public? Don't forget the rank structure.' So....

**MO:** Do you think that works? That informality when you think the time is right?

**Ski:** It should come naturally. Unfortunately some people...especially younger guys; they forget about that, they forget about those boundaries. Me in front of a Lieutenant or somebody and them calling me by my name or whatever. Officers or senior...officers above will pick that up. It makes it more difficult to maintain a rank structure, a discipline structure, there is a time and a place for everything when you're doing a job, play the game.

**Eddie:** I don't know what happens at Raleigh [new entry training] an 'at these days. I've no idea but I think it's a lot more relaxed than it was and I think that...you can sort of tell that with the young lads who have just joined a ship straightaway. You get lads that obviously know that you sort of need to be wary in the start but then you get others who come in and 'Alright, mate.' straightaway and it's ...'He's come straight from Raleigh.' and 'Are they getting away with too much?' I don't know.

**Ski:** Alternately, I've noticed from a [...] of a ship you get 'Good morning, Chief, how can I help you?' You're like 'Somebody's calling me Chief!' sort of thing [laughter]. You end up sitting there and after so long it's like 'Alright, Ski, how's it going?' Sometimes the boundaries are there and eventually become more relaxed with each other and informal.

**MO:** So do you...when you start a new relationship or somebody's just joined or you've just joined, how would you play that?

**Ski:** I think I mentioned about my first Coxswain, I would do it that way.

**MO:** How about you Eddie?

**Eddie:** Yeah, I am probably the same, yeah.

**Ski:** It's setting up those initial boundaries you know. Play the game, privately or working together: 'Call me Ski.' But in front of the Boss, in front of the XO etc, 'WEO [Weapon Engineering Officer] or Ski'.....'WEO or Chief' even [laughs]

**MO:** Do you think it's important to set up those boundaries early on or....

**Ski:** I think it is to er....save embarrassment later or problems later ...it's just to remind...'Look, you're in the Navy, play the game.'

**Eddie:** It also affects the er..younger ...the ones who have only been in a couple of years..the older ones...they know, if you like....I think it's the younger ones. You need to sort of say, you know, [MO: This is how it works?] yeah....Well I'm one of them, I'm really sort of relaxed, if you like, but there is boundaries....you've got to stick to them, so.....

## **HOW WOULD YOU PREFER TO BE TREATED?**

**MO:** So this question, might sound like a leading question but think about it. The question is: is this the way you prefer to be treated? And it's not a leading question in the sense that what I am trying to get to here is this the way you treat your subordinates and how you achieve a positive relationship with them. Now you might suppose that the people who are above you might try to treat you in the same way but there are obviously differences between junior rates and senior rates. Obviously if someone tried to treat you in the same way as an AB, you might not be too happy about that. So without wishing to lead you either way: is that the way you would prefer to be treated, that formality you were talking about to start with or the ability to flip between formal and informal when appropriate?

**Ski:** Flip between formal and informal. If you've got the constant sort of formal all the time, 'Yes, *sir*. How's it going, *sir*?' You know? I mean I don't like calling the COs 'Boss' Whereas I've had WEOs [Weapon Engineering Officers] who have said 'All right Boss?' That kinda thing, mmmm.

**Eddie:** Sorry what are we saying?

**MO:** The question is: is this the way you would prefer to be treated?

**Eddie:** Yeah, oh yeah. Yeah definitely. The good thing on small ships again, or relating to that again, compared to big ships in the past where....and I've played football throughout my naval career, ships and all my establishments. On big ships and all that and on establishments, you've got officers, senior rates and junior rates all in a team. Even the officers, when we are playing, like to be called sir. And don't actually...don't kinda say even...even though your there months with them, they won't 'I'm Matt' or 'I'm Mark, just call me that.' You know what I am saying. But on these if you're playing, quite happy for you to call them [...]....You can call them whatever, when you're playing sport or you're out socialising.

**MO:** So is that a good thing?

**Eddie:** Yeah. Definitely. I think it should be way. If you're playing sport it shouldn't be like 'Sir, sir.' To me it's a bit ....

**MO:** Especially if you've got 3 on your side.

**Eddie:** Well yeah.

**Ski:** Well we can use job titles like Navs [Navigating Officer] or Gunz [Gunnery Officer]. They'll respond to that.

**Eddie:** I just think that the boundary there sometimes between

		<p>officers and the rest..whereas senior rates if you just call them by their first names you wouldn't even think about Chief, PO, whatever...the officers, I think it's a bit...especially when you're doing sport and things...it should be first names. I don't see...I know there is still a rank structure. During that, you've still got to appreciate that.</p> <p><b>Ski:</b> It's peoples' ability to move from that as well. [Eddie: Yeah, yeah, yeah.] 'We're at work, not at the play at the moment.' so ...but with the ability to relax, however, off the playing field.</p> <p><b>MO:</b> Can I just probe into that one for a bit. The ability to switch from formal to informal and be able to carry it off. What kind of a leader can do that? Why do you think only some can do that and some can't and is it a good thing or a bad thing?</p> <p><b>Eddie:</b> It's a good thing. I think it's ....it's all down to confidence. And again confidence has a big play in it. Erm....</p> <p><b>Ski:</b> Confidence of the position..yeah...'I'm in charge, however.'</p> <p><b>Eddie:</b> Yeah 'However, we are relaxed now.' I think, yeah.</p> <p><b>MO:</b> OK Right.</p>
5	24:17.7 - 41:27.0	<p><b>TOPIC 3 - FORMAL AND INFORMAL INTERACTION.</b></p> <p><b>WHEN IS IT APPROPRIATE TO USE INFORMAL INTERACTION?</b></p> <p><b>MO:</b> OK, right. Well that brings me neatly onto my third topic. It's actually the final topic and then we've got some ending questions and summing up. But we're doing very well anyway. Erm...so this is my third one: formal and informal interaction. So that's come up a few times already, so we're just going to probe a little deeper into that. And my first question is: when is it appropriate to use <i>informal</i> interaction? [long pause]</p> <p><b>Eddie:</b> Sport.</p> <p><b>MO:</b> Sport? Sport, yeah.</p> <p><b>Eddie:</b> Socialising.</p> <p><b>Ski:</b> Having a run ashore, team-building.</p> <p><b>Eddie:</b> Ermm...which again, I think, happens on these [small ships] ....anyway.' Cos it's such a small team, you've <i>got</i> to get on. But on big ships, in the past, I wouldn't say that is the case...to be honest.</p> <p><b>MO:</b> Do you think that affects the big ships then? If they don't have the opportunity for that informality, do you think it affects their performance or do you think that works .....</p> <p><b>Ski:</b> I think it works for them, I think they need it because they are a bigger [Eddie: Yeah.] organisation, that they need that sort of rigid structure to function correctly.</p> <p><b>Eddie:</b> Aye, that's probably right, that. [Pause]</p> <p><b>SHOULD LEADERS MAINTAIN A DISTANCE BETWEEN THEMSELVES AND THEIR FOLLOWERS?</b></p>

**MO:** My second question, then, is should leaders maintain a distance between themselves and their followers?

**Eddie:** I think you've always got to have that little bit of time away from,...do you mean time away from them or stuff?

**MO:** I'm talking about a sort of social distance.

**Eddie:** Social distance. Erm....[Ski: No..no.] No ...

**Ski:** It's like that CO I said I had that for practically 2 years he kept his distance and ...I remember being in the mess. He came down after 2 years to socialise with the junior rates and that was it just he got bombarded with 'Why did you do this?' 'Why did you do that?' he said, 'The door was always open.' We didn't know that.

'You...you maintained that distance.' Whereas if you've got a CO who will socialise when you are on a run ashore or socialise when you are on the pitch. People get to know the person, know what they can get from him. Hmmm. It's 'Yes, he's the Boss but he can do this for me.' or, 'If I'm stuck, I can go to him or approach him.' Rather than, 'I've got this major problem. I don't wanna talk to the Boss, he's not approachable.'

**MO:** Do you think he..in that case he made a conscious decision to maintain a distance or do you think he just misjudged the situation?

**Ski:** Probably misjudged because he wasn't a bad CO. He can't be a bad CO if he's a Captain [rank] now. [laughter].

**Eddie:** And I had another instance of er..it was a warrant officer erm...Didn't like junior rates, if you like. Not didn't like them, he'd still speak to you but...social-wise, it was a no-no..completely. And I know what you probably think, 'I'll figure out who that is in a second.,[laughter]. Yeah, he just wouldn't socialise with junior rates...

**Ski:** This wouldn't be [name removed from transcript] by any chance? [laughter]

**Eddie:** Erm...oh! Erm...yeah...so he didn't socialise at all with junior rates. Wouldn't have it at all. And always wanted the senior rates to go somewhere different because he didn't want to socialise...Other people did, in the mess. However, they felt obliged to go with him because he was [laughs] a warrant officer. Yeah...and it was strange because we all got on fine with him but the socialising thing...no...no! And forgetting that he was once a junior rate. That's the thing I find hard because .....

**Ski:** Knocking down the social boundaries lets people talk between each other you know what I mean? 'I was wanting to say this about..this.' or 'I was wanting to say this about you.' or, 'Can you help me with this?' Knocking down that boundary even if it's only temporary can go a long way. If there is a formal boundary up all the time. You're thinking 'Oh God! This is pounding my head in. What am I going to do? Because I can't approach this person, they are not approachable.'

**Eddie:** You tend to find, well it relaxes everyone doesn't it? And you find out more about people if you socialise with them. I mean



it's....

**MO:** So ...can I just go back to that because that was quite an interesting example you gave of a warrant officer who didn't socialise with junior rates but in the work scenario...

**Eddie:** In the work scenario ...I mean...I got on brilliant with him.

**MO:** So what was...because that would be interesting to see what the effect on the ship was...because you might say 'It shouldn't have any effect.' because socialising is what you do voluntarily so it's not part of his job description. So I am just interested, what do you think the effect was?

**Eddie:** Erm...a lot of people sort of said a lot of things behind his back against him. But as I say I personally got on alright. I've got nothing bad to say about him. Because I got on fine with him and I still do. But a lot people did...didn't like him for that pure fact he was totally against...and more the fact ...

**Ski:** They didn't know him [Eddie: Yeah.] Privately...

**Eddie:** Yeah exactly because he was a nice guy. It was...he was ..just not having it at all. And it sort of affected the other senior rates. They wanted to go out with the lads but they felt like 'Oh, we can't.' They had to wait 'till he went home [back to the ship] because he wasn't one for staying out late, 12 O'Clock and he would....Then they'd join up with the rest of the lads.

**MO:** Yeah, 'cos there are instances where.....I won't...I'll remove that bit where you refer to his title but ....so we are just talking about a warrant officer. But I am also thinking of examples where, I see it myself...where officers have been told that they will not socialise erm..with junior rates or maybe not senior rates, that they have to go ashore as a mess [officers only] and so on. Erm...I don't know if you've had any similar experiences and what you think about that as well?

**Ski:** Er...I know of a lieutenant er...the individual, it's difficult to er...[...] refused to socialise with anyone other than officers to the point that we were at a certain location and we were...stuck...and the whole Ship's Company went out because of the time of year it was ...celebrations going on...and this particular officer begged the CO not to make them go out with the ratings [non-commissioned] [chuckles, laughter] because it wasn't that particular person's cup of tea..so that person refused to knock down social boundaries and to this day, when you hear that particular person's name mentioned it gets 9 people out of 10s' backs up.

**MO:** What is the effect, do you think, back on board [the ship] of that?

**Ski:** It's probably staying unpopular on board.

**MO:** How does it affect their work?

**Ski:** I think they got on with it. To be honest, yeah. Yeah, 'cos at the end ...you try to avoid the person...well not avoid but have not as much interaction, keep interaction professional and to a minimum. 'Cos that person is probably isolated from other events ....sort of like interacting fully with the team. Kept boundaries, 'I am such-and-such. Let's keep this at a professional minimum.'

**Eddie:** I...I...I totally think that when you are ashore and that. I don't think there should be an officers- go- on- their- own. When you're out you're out and I've got a friend whose a lieutenant and we socialise and we get on. I mean.....

**Ski:** Even if it's a, 'Hi. We'll bump into youse later.' You don't just say, 'Oh, they're over there. The senior rates are over there, we'll be over here.' You have a quick..you know...a quick drink, 'How's youse been enjoying yourselves? Going anywhere? Oh, are we going there? No, we'll go somewhere else.' [laughter]. You know.

**Eddie:** I know a lieutenant who I went to school with ...which I was *amazed* when saw him in the dockyard. [laughter] I didn't even know he was in the navy. I bumped into him and my first thought was 'What the ....' Because at school he [makes indifferent hand gesture] [laughter] Probably went to university and got his degree in whatever it was ...strange....but...

**MO:** You don't need a degree to be an officer.

**Eddie:** I know but... Another thing, I hate to bring up during this 'cos it's not to do with this but you tend to find that the officers who come up through the ranks and then went officer are a lot more approachable ...you know what I am trying to say? [MO: Yeah, well I got the approachable bit.] Yeah, also you like working for the guy because he's been there, seen it, done it, they know what you are doing. Whereas a lot of officers with degrees, they don't have a clue what you are doing day in, day out. And sometimes they don't appreciate what you are doing. And sometimes they are coming down from the bridge and they are, 'Why's this not fixed?' 'Well if you knew exactly what it took to get it fixed then you'd appreciate...'

**MO:** Are you then saying that somebody who has come up through the ranks that they are more credible as an officer?

**Eddie:** I'm not..no. I think it's because they appreciate what you do. They know roughly what you have done or what needs to be done to fix something or....that sort of thing.

**MO:** Sorry, I sounded a bit too one-sided. I just meant is there a credibility factor? Is it professional knowledge or is it the experience of what junior rates have done, you know, what they go through?

**Eddie:** It's about all those things to be honest.

**Ski:** I think it's a bit of both. I know one....probably several that have got across that boundary that have fully gone to dark side shall we say. That have forgotten their past and for some reason they may feel they have to prove something, that you are up against. I had one that said to me, 'You never called your CO "sir" once in that conversation.' I was absolutely 100% positive that I had. [laughter] I mean you get some [chuckling] every 5th letter is a 'sir' thrown in. Yeah, but ..It's like some SDs [Special Duty Officers (ex-senior rates)] transitions happen...some of them...

**Eddie:** Yeah, you do find that. You do get the occasional one but...

**Ski:** Especially weapon engineering officers, it tends to be that way. I mean that's not saying they're all like that but that was a lot...'cos I don't come across a lot of 'em to be honest. But certainly like...ME [Marine Engineering] ones they always seem to be OK.

**Eddie:** Yeah, yeah. I don't know[...] [Ski: Maybe it's a WE thing.] Yeah, 'Cos the pressure's always on WEs and MEs you know when the system's down and the pressure is on you to get it back. I think that's where they appreciate it a bit more. And they are able to say to the CO, 'Look. It needs this, it needs that.' 'Cos they've had that experience as well, they know. Whereas a lot....some officers are ....who haven't had experience going through the ranks they'll be like, 'Yeah, this'll take an hour.' or whatever, whereas we'll be like, 'No, it won't it'll take 3.' But then maybe they're scared to say to the CO, 'This is gonna take 3.' I dunno. It just seems to be a bit of a....don't know.

**MO:** Do you ever ...do you think as well...We're talking about officers coming through the ranks but I mean there is degree...I think you said...that they know what they are doing. They know how long it will take to fix such and such. Do you think that officers generally in your experience know enough, do they have enough knowledge of what you are doing or do you think that's something that is improving, getting worse or...

**Ski:** I would say it depends on the experience of the officer 'cos .....You go to a job, it's a new job. You don't have any experience, it builds up. I think it's probably one of the worst things about small ships is that officers seem to be shoved through so quickly. They just seem to be getting to that experience where they're about as high as they can get, well not high, they've got about as much experience as they can get, they're just getting used to it, bang! He's gone and the next one in and you're back down at that lower level again. They seem to go through quite quick. I remember one officer, he joined as a sub-lieutenant, the [...] Gunnery Officer. A year and half later and he's the XO [Executive Officer]. I thought, 'How did he manage to do that so quick?' Very....I mean....he's a Lieutenant Commander now, he was an SD. But it just seems to be shoved through so fast, and you think...I mean it takes years to get experience. They seem to be going through so quickly.

**Eddie:** But that happens in the ranks as well. Without a shadow of a doubt, people are being pushed through without experience.

**Ski:** I think we're.... the ET [Engineering Technician] branch is slowing down a bit now.

**MO:** It's good to have career progression, do you think it is important for people [Eddie: Yeah definitely. I think so personally, yeah.] Do you think there's a price to be paid for it in a sense of what you were talking about..of not accumulating enough experience?

**Eddie:** No I think the small ships are going to struggle. In a few years time, all the experience is going to be gone, it's gonna hit. It's gonna start soon, in the next 3 years, I would say and it's.....Most of the experience is gone. And it'll start hitting the ships quite bad.

**MO:** Why is that?

**Eddie:** I dunno, just people are being pushed through so fast. They are literally coming in with no experience....

**Ski:** I think they look at it as a cushy life [small ships]. It's still

		<p>displayed as...that cushy life..it's small ships, it's that informality, there's the jollies [interesting port visits] , the....and it's not like that now, it's quite practical, a lot of work with a little bit of play. And it hits people. 'Oh, I'm not doing this.' I had...I mean I've done it getting on 20 years, small ships 20 years. It's all I used to. I see anything above 500 tonnes, I'm scared. [laughter]. I wouldn't have a clue. They go about ...there's a W1 on this ship, there's W7. What on earth are they? I was ...when I was a WEM [Weapon Engineering Mechanic] I was on a [aircraft] carrier. They didn't have any titles like that. I'll just stick to the small ships, I'm happy with that. But you get some people, doing it, don't like it. They'll get the experience and then go back to whatever they were doing before. Whereas <i>my</i> experience I've built up over 20 years. And I've got 3 years left and that's it gone. And there's only one other WEO [Weapon Engineering Officer] in the squadron that's got the same experience level as me. He's going to go and there's another one whose due outside [leaving the service]. That's experience that's gone. I mean I remember when I was a killick [leading hand] the WEOs were all old guys...well not old guys but quite senior guys, they had the experience and there was loads of them. But there are so few now and the one that there are, they're very inexperienced. Eddie: But it's not the guys' fault that they need experienced people, that's just the way it is. But in another few years I reckon these ships will struggle. I think on the EC side of things, extended career [extensions of service], I think it should be on an individual basis. I don't think it should be a 'Right we need so many of these in so many years time.' if somebody's coming to the end of their career and they are good at what they do. I don't see why you can't extend 'em. To help out [Ski: Individually, yeah.] individually, rather than [...] 'Cos I know a couple who are going outside, don't wanna go outside. They're experienced...and...</p> <p><b>Ski:</b> I'm the same. If they gave me 10 years, I'd bite their arms off. They're offering us like, 2 years and it's an insult, you know like. 'Nah, you'll get a draft [one assignment] out of me, and that's it.'</p>
6	41:27.7 - 45:31.1	<p><b>THE VALUE OF FORMAL INTERACTION</b></p> <p>MO: All right, well can I move on then? So just thinking about....we were thinking about informal and then we were talking about distance. We're going to talk about formal interaction now. So just , when I am thinking about formal, I am thinking about very formal. So things like written orders, broadcasts, pipes [broadcasts], that sort of thing. It's where it is set down, there is no real interaction about it. What do you think is the value of that kind of information?</p> <p><b>Eddie:</b> It sorta gives everyone a sense of: 'Yeah, you are in the military. This is the way it is. these are the sort of times you have to go by what is being said.' Or what is being piped [broadcast]. It sorta gives you that.... [Ski: yeah, guidance] guidance if you like that yeah, you're in the military...</p> <p><b>Ski:</b> Guidance, leadership, direction. 'That guy's telling me I've got</p>

to do this. I've got to be there at that time and this is what's happening'. Or 'The Old Man's [Captain] made a pipe, I know what's happening.'

**MO:** So...so that's of value? [Ski: Uh-huh, mmmm]

**Ski:** Rather than let things tumble from day to day and if they pitch up but they don't wanna do anything. They're being told to do something. Somebody at the top's saying 'I want this to happen.' This person's making this happen, the organisation is doing it.

**Eddie:** You'll always find on these again that's there's always something in the pipeline so you get....a little bit of a heads up from the command saying, 'Right. This is in the pipeline it's not concrete yet, however...'

**MO:** Is this a programme thing?

**Eddie:** Yeah, that's it. Yep. So you get that formal sort [clicks his fingers]. 'Cos rumours start and cause all sorts. And you'll find as soon as a rumour starts, they'll get you in straightaway and [clicks his fingers] they'll put it on the head..

**MO:** And how do they do that? Through those sort of mediums or er...

**Eddie:** It depends, sometimes it's a broadcast pipe [announcement] sometimes....

**Ski:** Senior rates and officers in the Ops Room [muster].

**Eddie:** Sometimes it's Clear Lower Deck [muster of whole Ship's Company]. Sometimes, just senior rates, 'Right we'll put this on the head.' I mean they are formal situations where..

**MO:** Absolutely.

**Eddie:** You get the CO and XO together, 'Right, this is the ....'

**Ski:** You find if you don't get that thing....People don't...you see it...they'll sit down and they'll quite happily do nothing [Eddie: Hmmmm] and you'll get the rot sets in. So when something does have to be done or ...They'll question it, 'Oh, why?' 'You do because you're in the navy and he wants it done.' [laughter]

## **CO'S AIMS AND OBJECTIVES**

**MO:** OK. Thanks very much for that. Erm..and following on from that, how are you made aware of the CO's aims and objectives?

**Eddie:** He's got his CTMs [Captain's Temporary Memoranda]....

**Ski:** You'll have your Daily Orders...your...Command Aims...

**Eddie:** Command Aims are all the time, they are getting updated....all the time..

**MO:** Do you find those useful? Command Aims?

**Eddie:** Erm...

**Ski:** Certainly if they're achievable, yeah. From a CBRN [Chemical, Biological, Radiological, Nuclear (Damage)] , it's better than the old 'Fight, Float, Move' [older system for assessing Battle Damage priorities] thing. 'I wanna be...this is what I wanna do...I wanna be there. Right. You all go and make it so.' Then you can..sort of like...when you have the command huddle [meeting of command

		<p>team] or whatever you can...instead of... you tend to think of your thing: ME [Marine Engineering], WE [Weapon Engineering]. The MEs will be 'We have to fix this instead or this instead because the Command Aim is this. 'Cos if you want to do your thing, it's not the Command Aim, you can forget about that. He's got this aim. To do that, we've got to do A, B and C.'</p> <p><b>MO:</b> OK Anything else on that one? [Pause] No? OK.</p> <p><b>Ski:</b> I had to do that on an exercise once. I went in ...all of sudden they said, 'Oh, you have to fix this.' 'Well, actually you don't. We have to fix this instead 'cos we've got an air raid coming in in 20 minutes.' 'Ah right, yeah.' [laughter]</p> <p><b>MO:</b> Right OK. [Pause] My..er...last question which I think actually we've already discussed quite a lot, so I am going to adapt my [laughs] questioning route here because I was asking about distance again and how to reduce the distance but I think you've already..[yeah, yeah]. Unless you've got something to add to that? Basically the question is how can leaders reduce the distance between leaders and followers? Do you think we've already....</p> <p><b>Ski:</b> Yeah.</p> <p><b>Eddie:</b> I think so, yeah.</p> <p><b>MO:</b> OK.</p>
7	45:31.1 - 52:20.0	<p><b>ENDING QUESTIONS</b></p> <p><b>ADVICE FOR A COMMAND TEAM.</b></p> <p><b>MO:</b> OK, well. I'm just going to sort of er...summarise and end this now with three ending questions. And the first one: If you can just imagine yourself in...er...if you were working for FOST [Flag Officer Sea Training] erm...and you were there in a specific role which was to advise a junior Command Team on a ship how they should just generally behave and how they should conduct their lives with relation to the Ship's Company [crew]. What would your advice be? Try not to focus on the FOST side of it, the mechanics of FOST and all the rest of it. It's just the scenario. If you were going to give them good career, lifetime advice what would it be?</p> <p><b>Ski:</b> It's er...trust the people that work for you. It's especially take the advice of the more senior ones regardless of how you may feel about them personally.</p> <p><b>Eddie:</b> Again, you go back to confidence again. be confident, you know. Because people say things but without confidence, people pick up on it. Straightaway. If you're confident, come across confident. You might not know <i>exactly</i> what you are talking about but if you come across as if you do then again people ...sort of....go for that.</p> <p><b>Ski:</b> If you don't have a clue about something but you are robust enough to ooze confidence. Everything you think, say and do. It gives people that confidence even if it's misguided confidence but ...'Alright. He's happy, so I am happy too.'</p>

**Eddie:** If in doubt, ask. Kinda thing, you know. 'Cos you do find a lot of junior officer an' 'at, they're ....rather than ask someone they just do something and its' Why are you doing that? It's a bit...' Rather than ask for guidance they'll just sorta do it and you're like

....

**Ski:** Certainly. If somebody is more experienced than you....use them. [Eddie: Exactly]. Take their advice, share advice as well [Eddie: Oh, yeah.]

**MO:** That's good advice, thanks.

**Eddie:** And again these junior officers. Get down [below deck] straightaway and sorta spend time. I know it has happened on ships I have been on. 'Can I come and work with you for a few days?' That sort of thing, which is good, I think.

## SUMMARY

**MO:** OK, well what I am going to do now is to summarise what we said just to make sure I got it right. I mean I know I've got it all on my tape but it's just to know that I've got the right sort of message erm...then I've just got one last question. Erm....so really we spoke about interaction and I think you said that erm....what comes to mind, and that's when you mentioned confidence that you need to see that sort of confidence. I think you said as well that it was a mix of formal and informal, getting that side of it right. And I think you said that interaction does affect performance [Eddie: yeah] You felt that good interaction would lead to good performance [Ski: Uh-huh.] Er...and really in the sense that you were saying about a CO that was distant [Ski: Mmmm] that sort of negatively impacted [Ski: yes]. Also I think you said micro-managing as well. Where ...[Ski: Yeah, that affects morale a great deal.] So people would tend to stand back and therefore you loose the performance...

**Ski:** Takes up the whole organisation, micro-managing, yeah. 'Why's he taking an interest in this?' 'Surely he should be up there, reading the paper?' [laughter] Doing sudoku.

**MO:** Right, um...we talked about er... examples that you had and I think you mentioned sport as a good example of positive interaction [Eddie: yeah, yeah] Er, you said you tried to act with your subordinates positively by having..by setting up the boundaries earlier, I think was the message there um....[Both: Uh-huh, yeah] Getting the formality, informality part of it right and you said that was the way you liked to be treated yourselves [Both: yeah] . Er...when is it important to use informal interaction? I think you said sport, socialising [Eddie: yeah]. Should leaders maintain a distance? I got that you didn't think that was a good idea and you brought up that CO where there was too much distance [Both: U-huh, yeah]. You told me the value of pipes and broadcasts: lets people know, gets people galvanised in the right direction [Eddie: yeah] Erm...we talked about CO's aims and objectives erm...and that was it really. And then we asked that question about Sea

Training, you said confidence [Eddie: mmm.] and you were talking about having positive role models effectively about taking that advice from people with more experience [Ski: Mmm mmm]. Do you think I've summarised that more or less.....

**Eddie:** [Interrupts] Yeah, yeah. [emphatic] [MO: Missed anything?] Not really, no.

## SUGGESTIONS

**MO:** Right well, as I said to you, this is project 1 of 3 projects. So I am going to be looking more at interaction. Is there anything out with what we've discussed there that you think I should be looking at? Is there anything that I have missed, do you think?

**Eddie:** Erm...I don't....

**Ski:** [Interrupts] Don't think so. [Both: No]

**Eddie:** Are you doing it through all ranks?

**MO:** Yeah, I'm doing up to....I've finished all the junior rate ones and I'm probably going to finish on the senior rate ones here. What I tend to do is go through and when I start to hear a theme being repeated then I'll stop, then I know I've got a good sense of what most people think so. So I've done junior rates and er..senior rates so I've just got to officers. Although I am not sure how I'm going to split that one 'cos I think having a wardroom around the table might not work very well [Eddie: Hmmm] 'cos I think junior officers will probably try to say the right thing in front of the ....[Both: Yeah, definitely..yeah] ...I would probably need to isolate them a little bit so...

**Eddie:** It would be interesting what the study comes back and says from the junior rate, senior rate and officer level 'cos....

**Ski:**[Interrupts] We see it from our officers on our ....officer-wise you get er.....some COs just don't trust their wardroom. They'll trust the odd individual in it but that gets detected further down....

**MO:** Yeah, I could tell you a few stories about that as well but yes, you're right I am going to try to move on and do officers as well.

So thank you very much. I know I said thank you a couple of times but genuinely this does affect the research in a positive way and if I don't have your opinions then really it loses a lot of value. And just to reiterate that I will keep this on my PC and I'll just switch it off now.





## Appendix B

### Project 2 - Dataset

Professional

Would you go to this person for professional advice?	Never	Rarely	Sometimes	Always
Person A				
Person B				
Person C				
Person D				
Person E				
Person F				
Person G				
Person H				
Person I				
Person J				
Person K				
Person L				
Person M				
Person N				
Person O				
Person P				
Person Q				
Person R				
Person S				



Serial	Assessment	Density(Sport)	Leader Prestige		Highest Non-leader Prestige (Sport)	Density (Social)	Leader Prestige		Highest Non-leader Prestige (Social)	Density (Personal)	Leader Prestige		Highest Non-leader Prestige (Personal)	Density (Professional)	Leader Prestige		Highest Non-leader Prestige (Professional)	Density (Combined)	Leader Prestige		Highest Non-leader Prestige (Combined)
			D-L(Sport)	(Sport)		D-L(Social)	(Social)	(Social)			D-L(Personal)	(Personal)		D-L(Professional)	(Professional)	D-L(Combined)			(Combined)		
1 SAT	0.2	0	0	0	0.25	0.5	0.42	0.25	0.75	0.15	0.16	0.25	0.25	0.45	0.66	0.25	0.325	0.31	0.1875	0.375	
2 VSAT	0.5	0.5	1	0	0.5	0.5	0	1	0.5	0.5	0	1	0.5	0.167	0	0.5	0.41675	0.125	0.875	0.5	
3 BS	0	0	0	0	0	0.33	0.5	0.5	0.5	0.167	0.5	0	0.5	0.167	0.5	0	0.5	0.166	0.375	0.125	
4 SAT	0.214	0.238	0.286	0.286	0.428	0.5	0.428	0.429	0.714	0.143	0.119	0.428	0.428	0.304	0.286	0.714	0.714	0.29025	0.26775	0.46425	
5 SAT	0.214	0.238	0.286	0.286	0.428	0.5	0.428	0.429	0.714	0.143	0.119	0.428	0.428	0.304	0.286	0.714	0.714	0.29025	0.26775	0.46425	
6 SAT	0.214	0.238	0.286	0.286	0.428	0.5	0.428	0.429	0.714	0.143	0.119	0.428	0.428	0.304	0.286	0.714	0.714	0.29025	0.26775	0.46425	
7 VSAT	0.333	0.5	0.333	0.333	0.667	0.333	0.5	0.333	0.5	0.167	0.5	0.667	0.667	0.25	0.667	0.667	0.333	0.333	0.416675	0.5	
8 SAT	0	0	0	0	0	0.5	0.333	0.333	0.667	0.083	0	0.333	0.333	0.416	0.167	0.333	0.667	0.24875	0.125	0.24875	
9 SAT	0.333	0.5	0.333	0.333	0.667	0.333	0.5	0.333	0.5	0.167	0.5	0.667	0.667	0.25	0.667	0.667	0.333	0.333	0.416675	0.5	
10 SAT	0.214	0.238	0.286	0.286	0.428	0.5	0.428	0.429	0.714	0.143	0.119	0.428	0.428	0.304	0.286	0.714	0.714	0.29025	0.26775	0.46425	
11 SAT	0.163	0.2	0	0	0.4	0.318	0.363	0.18	0.45	0.127	0.144	0.1	0.2	0.204	0.218	0.272	0.465	0.203	0.23125	0.138	
12 VSAT	0.154	0.162	0	0	0.394	0.272	0.275	0.132	0.447	0.085	0.083	0.21	0.289	0.172	0.159	0.316	0.474	0.17075	0.16975	0.1645	
13 VSAT	0.233	0.35	0	0	0.4	0.633	0.55	0.6	0.8	0.2	0.25	0.4	0.4	0.566	0.45	0.6	0.8	0.408	0.4	0.4	
14 SAT	0.191	0.219	0	0	0.4	0.352	0.395	0.062	0.562	0.1	0.109	0.067	0.1333	0.196	0.214	0.1333	0.267	0.20975	0.23425	0.065575	
15 SAT	0.333	0.5	0.5	0.5	0.5	0.667	0.5	0.5	1	0.333	0.5	0.5	0.5	0.333	0	1	0	0.4165	0.375	0.625	
16 SAT	0	0	0	0	0	0.5	0.333	0.333	0.667	0.083	0	0.333	0.333	0.416	0.167	0.333	0.667	0.24875	0.125	0.24875	
17 SAT	0.214	0.238	0.286	0.286	0.428	0.5	0.428	0.429	0.714	0.143	0.119	0.428	0.428	0.304	0.286	0.714	0.714	0.29025	0.26775	0.46425	
18 SAT	0.333	0.5	0.333	0.333	0.667	0.333	0.5	0.333	0.5	0.167	0.5	0.667	0.667	0.25	0.667	0.667	0.333	0.333	0.416675	0.5	
19 SAT	0.333	0.5	0.5	0.5	0.5	0.667	0.5	0.5	1	0.333	0.5	0.5	0.5	0.333	0	1	0	0.4165	0.375	0.625	
20 VSAT	0.333	0.5	0.5	0.5	0.5	0.667	0.5	0.5	1	0.333	0.5	0.5	0.5	0.333	0	1	0	0.4165	0.375	0.625	
21 SAT	0.214	0.238	0.286	0.286	0.428	0.5	0.428	0.429	0.714	0.143	0.119	0.428	0.428	0.304	0.286	0.714	0.714	0.29025	0.26775	0.46425	
22 SAT	0.154	0.162	0	0	0.394	0.272	0.275	0.132	0.447	0.085	0.083	0.21	0.289	0.172	0.159	0.316	0.474	0.17075	0.16975	0.1645	
23 VSAT	0.233	0.35	0	0	0.4	0.633	0.55	0.6	0.8	0.2	0.25	0.4	0.4	0.566	0.45	0.6	0.8	0.408	0.4	0.4	
24 SAT	0.333	0.5	0	0	0.4	0.633	0.55	0.6	0.8	0.2	0.25	0.4	0.4	0.566	0.45	0.6	0.8	0.408	0.4	0.4	
25 SAT	0.233	0.35	0	0	0.4	0.633	0.55	0.6	0.8	0.2	0.25	0.4	0.4	0.566	0.45	0.6	0.8	0.408	0.4	0.4	
26 SAT	0.333	0.5	0.5	0.5	0.5	0.667	0.5	0.5	1	0.333	0.5	0.5	0.5	0.333	0	1	0	0.4165	0.375	0.625	
27 SAT	0.191	0.219	0	0	0.4	0.352	0.395	0.062	0.562	0.1	0.109	0.067	0.1333	0.196	0.214	0.1333	0.267	0.20975	0.23425	0.065575	
28 SAT	0.191	0.219	0	0	0.4	0.352	0.395	0.062	0.562	0.1	0.109	0.067	0.1333	0.196	0.214	0.1333	0.267	0.20975	0.23425	0.065575	
29 GOOD	0.191	0.219	0	0	0.4	0.352	0.395	0.062	0.562	0.1	0.109	0.067	0.1333	0.196	0.214	0.1333	0.267	0.20975	0.23425	0.065575	
30 VSAT	0.333	0.5	0.5	0.5	0.5	0.667	0.5	0.5	1	0.333	0.5	0.5	0.5	0.333	0	1	0	0.4165	0.375	0.625	
31 SAT	0.154	0.162	0	0	0.394	0.272	0.275	0.132	0.447	0.085	0.083	0.21	0.289	0.172	0.159	0.316	0.474	0.17075	0.16975	0.1645	
32 VSAT	0.154	0.162	0	0	0.394	0.272	0.275	0.132	0.447	0.085	0.083	0.21	0.289	0.172	0.159	0.316	0.474	0.17075	0.16975	0.1645	
33 SAT	0.154	0.167	0.2	0	0.4	0.322	0.5	0.6	0.127	0.111	0.4	0.4	0.4	0.218	0.188	0.7	0.7	0.22475	0.197	0.45	
34 VSAT	0.214	0.238	0.286	0.286	0.428	0.5	0.428	0.429	0.714	0.143	0.119	0.428	0.428	0.304	0.286	0.714	0.714	0.29025	0.26775	0.46425	
35 SAT	0.333	0.5	0.333	0.333	0.667	0.333	0.5	0.333	0.5	0.167	0.5	0.667	0.667	0.25	0.667	0.667	0.333	0.333	0.416675	0.5	
36 SAT	0.154	0.162	0	0	0.394	0.272	0.275	0.132	0.447	0.085	0.083	0.21	0.289	0.172	0.159	0.316	0.474	0.17075	0.16975	0.1645	
37 BS	0	0	0	0	0	0.33	0.5	0.5	0.5	0.167	0.5	0	0.5	0.167	0.5	0	0.5	0.166	0.375	0.125	
38 VSAT	0.5	0.5	1	0	0.5	0.5	0	1	0.5	0.5	0	1	0.5	0.167	0	0.5	0	0.41675	0.125	0.875	
39 SAT	0	0	0	0	0	0.33	0.5	0.5	0.5	0.167	0.5	0	0.5	0.167	0.5	0	0.5	0.166	0.375	0.125	
41 BS	0.191	0.219	0	0	0.4	0.352	0.395	0.062	0.562	0.1	0.109	0.067	0.1333	0.196	0.214	0.1333	0.267	0.20975	0.23425	0.065575	
42 SAT	0.191	0.219	0	0	0.4	0.352	0.395	0.062	0.562	0.1	0.109	0.067	0.1333	0.196	0.214	0.1333	0.267	0.20975	0.23425	0.065575	
43 UNSAT	0.233	0.35	0	0	0.4	0.633	0.55	0.6	0.8	0.2	0.25	0.4	0.4	0.566	0.45	0.6	0.8	0.408	0.4	0.4	
44 SAT	0.233	0.35	0	0	0.4	0.633	0.55	0.6	0.8	0.2	0.25	0.4	0.4	0.566	0.45	0.6	0.8	0.408	0.4	0.4	
45 SAT	0.233	0.35	0	0	0.4	0.633	0.55	0.6	0.8	0.2	0.25	0.4	0.4	0.566	0.45	0.6	0.8	0.408	0.4	0.4	
46 GOOD	0.233	0.35	0	0	0.4	0.633	0.55	0.6	0.8	0.2	0.25	0.4	0.4	0.566	0.45	0.6	0.8	0.408	0.4	0.4	
47 SAT	0.233	0.35	0	0	0.4	0.633	0.55	0.6	0.8	0.2	0.25	0.4	0.4	0.566	0.45	0.6	0.8	0.408	0.4	0.4	
48 SAT	0.233	0.35	0	0	0.4	0.633	0.55	0.6	0.8	0.2	0.25	0.4	0.4	0.566	0.45	0.6	0.8	0.408	0.4	0.4	
49 SAT	0.233	0.35	0	0	0.4	0.633	0.55	0.6	0.8	0.2	0.25	0.4	0.4	0.566	0.45	0.6	0.8	0.408	0.4	0.4	
50 BS	0.233	0.35	0	0	0.4	0.633	0.55	0.6	0.8	0.2	0.25	0.4	0.4	0.566	0.45	0.6	0.8	0.408	0.4	0.4	
51 SAT	0.233	0.35	0	0	0.4	0.633	0.55	0.6	0.8	0.2	0.25	0.4	0.4	0.566	0.45	0.6	0.8	0.408	0.4	0.4	
52 SAT	0.233	0.35	0	0	0.4	0.633	0.55	0.6	0.8	0.2	0.25	0.4	0.4	0.566	0.45	0.6	0.8	0.408	0.4	0.4	
53 SAT	0.191	0.219	0	0	0.4	0.352	0.395	0.062	0.562	0.1	0.109	0.067	0.1333	0.196	0.214	0.1333	0.267	0.20975	0.23425	0.065575	
54 SAT	0.191	0.219	0	0	0.4	0.352	0.395	0.062	0.562	0.1	0.109	0.067	0.1333	0.196	0.214	0.1333	0.267	0.20975	0.23425	0.065575	
55 VSAT	0.333	0.5	0.5	0.5	0.5	0.667	0.5	0.5	1	0.333	0.5	0.5	0.5	0.333	0	1	0	0.4165	0.375	0.625	
56 VSAT	0	0	0	0	0	0.5	0.333	0.333	0.667	0.083	0	0.333	0.333	0.416	0.167	0.333	0.667	0.24875	0.125	0.24875	
57 SAT	0.333	0.5	0.333	0.333	0.667	0.333	0.5	0.333	0.5	0.167	0.5	0.667	0.667	0.25	0.667	0.667	0.333	0.333	0.416675	0.5	
58 SAT	0.154	0.167	0.2	0	0.4	0.322	0.5	0.6	0.127	0.111	0.4	0.4	0.4	0.218	0.188	0.7	0.7	0.22475	0.197	0.45	
59 SAT	0	0	0	0	0	0.33	0.5	0.5	0.5	0.167	0.5	0	0.5	0.167	0.5	0	0.5	0.166	0.375	0.125	
60 VSAT	0.154	0.162	0	0	0.394	0.272	0.275	0.132	0.447	0.085	0.083	0.21	0.289	0.172	0.159	0.316	0.474	0.17075	0.16975	0.1645	
61 SAT	0.233	0.35	0	0	0.4	0.633	0.55	0.6	0.8	0.2	0.25	0.4	0.4	0.566	0.45	0.6	0.8	0.408	0.4	0.4	
62 VSAT	0	0	0	0	0	0.33	0.5	0.5	0.5	0.167	0.5	0	0.5	0.167	0.5	0	0.5	0.166	0.375	0.125	
63 BS	0.333	0.5	0.5	0.5	0.5	0.667	0.5	0.													

Serial Assessment		Density(Sport)	D-L(Sport)	Leader Prestige (Sport)	Highest Non-leader Prestige (Sport)	Density (Social)	D-L(Social)	Leader Prestige (Social)	Highest Non-leader Prestige (Social)	Density (Personal)	D-L(Personal)	Leader Prestige (Personal)	Highest Non-leader Prestige (Personal)	Density (Professional)	D-L(Professional)	Leader Prestige (Professional)	Highest Non-leader Prestige (Professional)	Density (Combined)	D-L(Combined)	Leader Prestige (Combined)	Highest Non-leader Prestige (Combined)
81 SAT	0.462	0.469	0.079	1	0.422	0.436	0.158	1	0.292	0.288	0.289	1	0.518	0.517	0.421	1	0.4235	0.43025	0.23675	1	
82 SAT	0.85	1	0.33	1	0.857	0.933	0.667	1	0.952	0.7	0.833	1	0.952	1	0.833	1	0.90275	0.94025	0.66575	1	
83 SAT	0.5	0.667	0.333	1	0.5	0.667	0.333	1	0.8	1	0.333	1	0.833	1	0.667	1	0.65825	0.7	0.4165	1	
84 SAT	0.166	0.333	0	0.333	0	0	0	0	0	0	0	0	0.166	0	0.333	0.333	0.083	0.12475	0.08325	0.1665	
85 VSAT	0.555	0.338	0.333	0.778	0.644	0.611	0.333	0.889	0.422	0.388	0.555	0.777	0.667	0.611	0.889	1	0.572	0.51775	0.5275	0.861	
86 VSAT	0.85	1	0.33	1	0.857	0.933	0.667	1	0.952	0.7	0.833	1	0.952	1	0.833	1	0.90275	0.94025	0.66575	1	
87 VSAT	0.462	0.489	0.079	1	0.422	0.436	0.158	1	0.292	0.288	0.289	1	0.518	0.517	0.421	1	0.4235	0.43025	0.23675	1	
88 GOOD	0.507	0.714	0.286	0.857	0.667	0.5	0.333	0.381	0.207	0.5	0.833	0.667	0.5	0.833	0.6	0.833	1	0.5805	0.60725	0.488	0.9225
89 VSAT	0.462	0.489	0.079	1	0.422	0.436	0.158	1	0.292	0.288	0.289	1	0.518	0.517	0.421	1	0.4235	0.43025	0.23675	1	
90 VSAT	0.5	0	0	1	0.66	1	1	1	0.5	0.5	0.5	1	1	1	1	1	0.665	0.54	0.625	1	
91 SAT	0.5	0	0	0	0.66	1	1	1	0.5	0.5	0.5	1	1	1	1	1	0.665	0.54	0.625	1	
92 VSAT	0.462	0.489	0.079	1	0.422	0.436	0.158	1	0.292	0.288	0.289	1	0.518	0.517	0.421	1	0.4235	0.43025	0.23675	1	
93 SAT	0.333	0	0.5	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0.0825	0	0.125	0.5	
94 SAT	0.333	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.333	0.5	0.5	0.5	0.667	1	0.5	1	0.45825	0.5	0.5	0.5
95 GOOD	0.333	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.333	0.5	0.5	0.5	0.667	1	0.5	1	0.45825	0.5	0.5	0.5
96 GOOD	0.333	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.333	0.5	0.5	0.5	0.667	1	0.5	1	0.45825	0.5	0.5	0.5
97 VSAT	0.85	1	0.33	1	0.857	0.933	0.667	1	0.952	0.7	0.833	1	0.952	1	0.833	1	0.90275	0.94025	0.66575	1	
98 GOOD	0.85	1	0.33	1	0.857	0.933	0.667	1	0.952	0.7	0.833	1	0.952	1	0.833	1	0.90275	0.94025	0.66575	1	
99 VSAT	0.85	1	0.33	1	0.857	0.933	0.667	1	0.952	0.7	0.833	1	0.952	1	0.833	1	0.90275	0.94025	0.66575	1	
100 VSAT	0.85	1	0.33	1	0.857	0.933	0.667	1	0.952	0.7	0.833	1	0.952	1	0.833	1	0.90275	0.94025	0.66575	1	
101 SAT	0.462	0.489	0.079	1	0.422	0.436	0.158	1	0.292	0.288	0.289	1	0.518	0.517	0.421	1	0.4235	0.43025	0.23675	1	
102 VSAT	0.546	0.643	0.667	1	0.56	0.51	0.867	1	0.316	0.333	0.2	1	0.618	0.644	0.5	1	0.535	0.53425	0.5585	1	
103 GOOD	0.546	0.643	0.667	1	0.56	0.51	0.867	1	0.316	0.333	0.2	1	0.618	0.644	0.5	1	0.535	0.53425	0.5585	1	
104 VSAT	0.646	0.643	0.667	1	0.56	0.51	0.867	1	0.316	0.333	0.2	1	0.618	0.644	0.5	1	0.535	0.53425	0.5585	1	
105 SAT	0.333	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.333	0.5	0.5	0.5	0.667	1	0.5	1	0.45825	0.5	0.5	0.5
106 SAT	0.462	0.489	0.079	1	0.422	0.436	0.158	1	0.292	0.288	0.289	1	0.518	0.517	0.421	1	0.4235	0.43025	0.23675	1	
108 SAT	0.85	1	0.33	1	0.857	0.933	0.667	1	0.952	0.7	0.833	1	0.952	1	0.833	1	0.90275	0.94025	0.66575	1	
109 SAT	0.85	1	0.33	1	0.857	0.933	0.667	1	0.952	0.7	0.833	1	0.952	1	0.833	1	0.90275	0.94025	0.66575	1	
110 SAT	0.166	0.333	0	0.333	0	0	0	0	0	0	0	0	0.166	0	0.333	0.333	0.083	0.12475	0.08325	0.1665	
111 VSAT	0.166	0.333	0	0.333	0	0	0	0	0	0	0	0	0.166	0	0.333	0.333	0.083	0.12475	0.08325	0.1665	
112 SAT	0.5	0.667	0.333	1	0.5	0.667	0.333	1	0.8	1	0.333	1	0.833	1	0.667	0.667	0.083	0.12475	0.08325	0.1665	
113 SAT	0.166	0.333	0	0.333	0	0	0	0	0	0	0	0	0.166	0	0.333	0.333	0.083	0.12475	0.08325	0.1665	
114 SAT	0.462	0.489	0.079	1	0.422	0.436	0.158	1	0.292	0.288	0.289	1	0.518	0.517	0.421	1	0.4235	0.43025	0.23675	1	
115 VSAT	0.555	0.338	0.333	0.778	0.644	0.611	0.333	0.889	0.422	0.388	0.555	0.777	0.667	0.611	0.889	1	0.572	0.51775	0.5275	0.861	
116 VSAT	0.5	0	0	0.66	0.66	1	1	1	0.5	0.5	0.5	1	1	1	1	1	0.665	0.54	0.625	1	
117 SAT	0.599	0.541	0.636	0.818	0.53	0.455	0.91	0.91	0.327	0.377	0.1	0.7	0.491	0.563	0.682	1	0.48675	0.47225	0.582	0.857	
118 SAT	0.599	0.541	0.636	0.818	0.53	0.455	0.91	0.91	0.327	0.377	0.1	0.7	0.491	0.563	0.682	1	0.48675	0.47225	0.582	0.857	
119 SAT	0.599	0.541	0.636	0.818	0.53	0.455	0.91	0.91	0.327	0.377	0.1	0.7	0.491	0.563	0.682	1	0.48675	0.47225	0.582	0.857	
120 VSAT	0.599	0.541	0.636	0.818	0.53	0.455	0.91	0.91	0.327	0.377	0.1	0.7	0.491	0.563	0.682	1	0.48675	0.47225	0.582	0.857	
121 SAT	0.33	0	0.5	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0.0825	0	0.125	0.125	
122 VSAT	0.546	0.643	0.667	1	0.56	0.51	0.867	1	0.316	0.333	0.2	1	0.618	0.644	0.5	1	0.535	0.53425	0.5585	1	
123 GOOD	0.646	0.643	0.667	1	0.56	0.51	0.867	1	0.316	0.333	0.2	1	0.618	0.644	0.5	1	0.535	0.53425	0.5585	1	
124 VSAT	0.5	0.667	0.333	1	0.5	0.667	0.333	1	0.8	1	0.333	1	0.833	1	0.667	1	0.65825	0.7	0.4165	1	
125 SAT	0.462	0.489	0.079	1	0.422	0.436	0.158	1	0.292	0.288	0.289	1	0.518	0.517	0.421	1	0.4235	0.43025	0.23675	1	
126 SAT	0.555	0.338	0.333	0.778	0.644	0.611	0.333	0.889	0.422	0.388	0.555	0.777	0.667	0.611	0.889	1	0.572	0.51775	0.5275	0.861	
127 SAT	0.607	0.714	0.286	0.857	0.667	0.5	0.333	1	0.381	0.207	0.5	0.833	0.667	0.6	0.833	1	0.5805	0.60725	0.488	0.9225	
128 VSAT	0.5	0	0	0.66	0.66	1	1	1	0.5	0.5	0.5	1	1	1	1	1	0.665	0.54	0.625	1	
129 VSAT	0.5	0	0	0.66	0.66	1	1	1	0.5	0.5	0.5	1	1	1	1	1	0.665	0.54	0.625	1	
130 SAT	0.33	0	0.5	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0.0825	0	0.125	0.125	
131 SAT	0.462	0.489	0.079	1	0.422	0.436	0.158	1	0.292	0.288	0.289	1	0.518	0.517	0.421	1	0.4235	0.43025	0.23675	1	
132 VSAT	0.166	0.333	0	0.333	0	0	0	0	0	0	0	0	0.166	0	0.333	0.333	0.083	0.12475	0.08325	0.1665	
133 BS	0.599	0.541	0.636	0.818	0.53	0.455	0.91	0.91	0.327	0.377	0.1	0.7	0.491	0.563	0.682	1	0.48675	0.47225	0.582	0.857	
134 SAT	0.333	0.5	0.5	0.5	0.5	1	0.5	0.5	0.333	0.5	0.5	0.5	0.667	1	0.5	1	0.45825	0.5	0.5	0.5	
135 SAT	0.462	0.489	0.079	1	0.422	0.436	0.158	1	0.292	0.288	0.289	1	0.518	0.517	0.421	1	0.4235	0.43025	0.23675	1	
136 SAT	0.85	1	0.33	1	0.857	0.933	0.667	1	0.952	0.7	0.833	1	0.952	1	0.833	1	0.90275	0.94025	0.66575	1	
137 SAT	0.546	0.643	0.667	1	0.56	0.51	0.867	1	0.316	0.333	0.2	1	0.618	0.644	0.5	1	0.535	0.53425	0.5585	1	
138 BS	0.436	0.424	0.5	1	0.632	0.691	0.187	0.937	0.279	0.291	0.187	0.937	0.262	0.263	0.5	0.562	0.40225	0.41725	0.3435	0.859	
139 SAT	0.333	0.5	0.333	0.333	0.833	1	0.667	1	0	0	0	0	0.416	0.5	0.667	0.667	0.3955	0.5	0.41675	0.5	
140 VSAT	0	0	0	0.166	0	0.5	0.5	0.5	0.667	0	1	1	0.667	0	1	1	0.375	0.375	0	0.625	
141 SAT	0	0	0	0.167	0.167	0	0.333	0.833	0.667	0	1	1	0.5	0.667	0.667	0.667	0.375	0.375	0.41675	0.5	
142 VSAT	0.333	0.5	0.333	0.333	0.833	1	0.667	1	0	0	0	0	0.416	0.5	0.667	0.667	0.3955	0.5	0.41675	0.5	
143 SAT	0.5	0.333	0.333	0.667	0.833	0.667	1	1	0.5	0.5	1	1	0.35	0.25	1	1	0.54575	0.4375	0.83325	0.91675	
144 GOOD	0.5	0.333	0.333	0.667	0.833	0.667	1	1	0.5	0.5	1	1	0.35	0.25	1	1	0.54575	0.4375	0.83325	0.91675	
145 SAT	0.487	0.5	0.417	1	0.782	0.787	0.75	1	0.372	0.346	0.5	0.667	0.327	0.311	0.833	0.833	0.492	0.4865	0.625	0.875	
147 SAT	0.426	0.273	0.122	0.577	0.596	0.195	0.195	1	0.231	0.241	0.024	1	0.202	0.206</							

Serial Assessment	Density(Sport)	Leader Prestige (Sport)	Highest Non-leader Prestige (Sport)	Density (Social)	D-L(Social)	Leader Prestige (Social)	Highest Non-leader Prestige (Social)	Density (Personal)	D-L(Personal)	Leader Prestige (Personal)	Highest Non-leader Prestige (Personal)	Density (Professional)	D-L(Professional)	Leader Prestige (Professional)	Highest Non-leader Prestige (Professional)	Density (Combined)	D-L(Combined)	Leader Prestige (Combined)	Highest Non-leader Prestige (Combined)		
163 SAT	0	0	0	0	0	0	0	0	0.333	0.5	0.5	0.333	0.5	0.5	0.1665	0.25	0.25	0.25			
164 SAT	0	0	0	0	0	0	0	0	0.333	0.5	0.5	0.333	0.5	0.5	0.1665	0.25	0.25	0.25			
165 SAT	0	0	0	0	0.167	0.167	0	0.333	0.833	0.667	1	1	0.5	0.667	0.667	0.375	0.37525	0.41675	0.5		
166 BS	0.426	0.273	0.122	1	0.577	0.596	0.195	1	0.231	0.241	0.024	1	0.202	0.206	0.195	0.561	0.359	0.329	0.134		
167 SAT	0.6	1	0	1	0.916	1	1	1	0.5	0.833	0	0.75	0.5	0.583	0.75	0.75	0.65	0.833	0.4375	0.8125	
170 VSAT	0	0	0	0	0.166	0	0.5	0.5	0.667	0	1	1	0.667	0	1	1	0.375	0	0.625	0.625	
171 SAT	0.426	0.273	0.122	1	0.577	0.596	0.195	1	0.231	0.241	0.024	1	0.202	0.206	0.195	0.561	0.359	0.329	0.134	0.89025	
172 SAT	0.6	1	0	0.75	1	0.916	1	1	0.5	0.833	0	0.75	0.5	0.583	0.75	0.75	0.65	0.833	0.4375	0.8125	
173 SAT	0.6	1	0	0.75	1	0.916	1	1	0.5	0.833	0	0.75	0.5	0.583	0.75	0.75	0.65	0.833	0.4375	0.8125	
174 BS	0.6	1	0	0.75	1	0.916	1	1	0.5	0.833	0	0.75	0.5	0.583	0.75	0.75	0.65	0.833	0.4375	0.8125	
175 VSAT	0.6	1	0	0.75	1	0.916	1	1	0.5	0.833	0	0.75	0.5	0.583	0.75	0.75	0.65	0.833	0.4375	0.8125	
176 SAT	0.436	0.424	0.5	1	0.632	0.691	0.187	0.937	0.279	0.291	0.187	0.937	0.262	0.263	0.5	0.562	0.40225	0.41725	0.3435	0.859	
177 VSAT	0.436	0.424	0.5	1	0.632	0.691	0.187	0.937	0.279	0.291	0.187	0.937	0.262	0.263	0.5	0.562	0.40225	0.41725	0.3435	0.859	
178 SAT	0	0	0	0	0	0	0	0	0.333	0.5	0.5	0.333	0.5	0.5	0.1665	0.25	0.25	0.25	0.25		
179 GOOD	0	0	0	0	0.167	0.167	0	0.333	0.833	0.667	1	1	0.5	0.667	0.667	0.375	0.37525	0.41675	0.5	0.5	
180 VSAT	0.436	0.424	0.5	1	0.632	0.691	0.187	0.937	0.279	0.291	0.187	0.937	0.262	0.263	0.5	0.562	0.40225	0.41725	0.3435	0.859	
181 SAT	0.436	0.424	0.5	0.632	0.691	0.187	0.937	0.279	0.291	0.187	0.937	0.262	0.263	0.5	0.562	0.40225	0.41725	0.3435	0.859		
182 VSAT	0.436	0.424	0.5	1	0.632	0.691	0.187	0.937	0.279	0.291	0.187	0.937	0.262	0.263	0.5	0.562	0.40225	0.41725	0.3435	0.859	
183 SAT	0.6	1	0	0.75	1	0.916	1	1	0.5	0.833	0	0.75	0.5	0.583	0.75	0.75	0.65	0.833	0.4375	0.8125	
184 SAT	0.6	1	0	0.75	1	0.916	1	1	0.5	0.833	0	0.75	0.5	0.583	0.75	0.75	0.65	0.833	0.4375	0.8125	
185 GOOD	0.6	1	0	0.75	1	0.916	1	1	0.5	0.833	0	0.75	0.5	0.583	0.75	0.75	0.65	0.833	0.4375	0.8125	
186 SAT	0.6	1	0	0.75	1	0.916	1	1	0.5	0.833	0	0.75	0.5	0.583	0.75	0.75	0.65	0.833	0.4375	0.8125	
187 SAT	0.426	0.273	0.122	1	0.577	0.596	0.195	1	0.231	0.241	0.024	1	0.202	0.206	0.195	0.561	0.359	0.329	0.134	0.89025	
188 SAT	0.7	0.833	0.5	1	0.9	0.583	0.75	1	0.4	0.167	0.5	0.5	0	0	0	0	0.39575	0.4375	0.625	0.625	
189 SAT	0.6	1	0	0.75	1	0.916	1	1	0.5	0.833	0	0.75	0.5	0.583	0.75	0.75	0.65	0.833	0.4375	0.8125	
190 BS	0.6	1	0	0.75	1	0.916	1	1	0.5	0.833	0	0.75	0.5	0.583	0.75	0.75	0.65	0.833	0.4375	0.8125	
191 BS	0.6	1	0	0.75	1	0.916	1	1	0.5	0.833	0	0.75	0.5	0.583	0.75	0.75	0.65	0.833	0.4375	0.8125	
192 SAT	0.333	0.5	0.333	0.333	0.833	1	0.667	1	0	0	0	0	0.416	0.5	0.667	0.667	0.3955	0.5	0.41675	0.5	
193 SAT	0.487	0.469	0.583	1	0.5	0.5	0.25	0.833	0.269	0.303	0.083	0.833	0.252	0.259	0.333	0.417	0.377	0.38275	0.31225	0.77075	
194 SAT	0.487	0.469	0.583	1	0.5	0.5	0.25	0.833	0.269	0.303	0.083	0.833	0.252	0.259	0.333	0.417	0.377	0.38275	0.31225	0.77075	
195 SAT	0.487	0.469	0.583	1	0.5	0.5	0.25	0.833	0.269	0.303	0.083	0.833	0.252	0.259	0.333	0.417	0.377	0.38275	0.31225	0.77075	
196 VSAT	0.487	0.469	0.583	1	0.5	0.5	0.25	0.833	0.269	0.303	0.083	0.833	0.252	0.259	0.333	0.417	0.377	0.38275	0.31225	0.77075	
197 SAT	0.049	0.045	0.146	0.244	0.165	0.161	0.146	0.975	0.157	0.152	0.244	1	0.194	0.19	0.317	0.39	0.14125	0.137	0.21325	0.65225	
198 GOOD	0	0	0	0	0.555	0.429	1	1	0.305	0.321	0.25	1	0.563	0.628	0.625	0.625	0.35575	0.3445	0.46875	0.65625	
199 SAT	0.049	0.045	0.146	0.244	0.165	0.161	0.146	0.975	0.157	0.152	0.244	1	0.194	0.19	0.317	0.39	0.14125	0.137	0.21325	0.65225	
200 SAT	1	1	1	1	1	1	1	1	0.452	0.5	0.667	0.667	0.638	0.566	1	1	0.7725	0.7665	0.91675	0.91675	
201 BS	1	1	1	1	1	1	1	1	0.452	0.5	0.667	0.667	0.638	0.566	1	1	0.7725	0.7665	0.91675	0.91675	
202 SAT	1	1	1	1	1	1	1	1	0.452	0.5	0.667	0.667	0.638	0.566	1	1	0.7725	0.7665	0.91675	0.91675	
203 BS	0.333	0	0.5	0.5	0.333	0	0.5	0.5	0.167	0	0	0.5	0.75	0.75	0.5	1	0.39575	0.1875	0.375	0.625	
204 GOOD	0.049	0.045	0.146	0.244	0.165	0.161	0.146	0.975	0.157	0.152	0.244	1	0.194	0.19	0.317	0.39	0.14125	0.137	0.21325	0.65225	
206 BS	0.049	0.045	0.146	0.244	0.165	0.161	0.146	0.975	0.157	0.152	0.244	1	0.194	0.19	0.317	0.39	0.14125	0.137	0.21325	0.65225	
207 SAT	0.049	0.045	0.146	0.244	0.165	0.161	0.146	0.975	0.157	0.152	0.244	1	0.194	0.19	0.317	0.39	0.14125	0.137	0.21325	0.65225	
211 BS	0.333	0	0.5	0.5	0.333	0	0.5	0.5	0.167	0	0	0.5	0.75	0.75	0.5	1	0.39575	0.1875	0.375	0.625	
212 VSAT	0.166	0	0.333	0.333	0.333	0.333	0.333	0.333	0.5	0.5	1	0.667	0.868	0.863	1	1	0.47175	0.429	0.6665	0.58325	
213 SAT	0.35	0.583	0	0.5	0.5	1	0.5	1	0.4	0.5	0.5	0.5	0.5	0.5	0.416	1	1	0.4375	0.62475	0.5	0.75
214 VSAT	0.166	0.333	0	0.333	0.333	0.333	0.333	0.667	0.167	0.167	0.333	0.333	0.444	0.75	0.333	0.667	0.2775	0.39575	0.33325	0.5	
215 SAT	0.049	0.045	0.146	0.244	0.165	0.161	0.146	0.975	0.157	0.152	0.244	1	0.194	0.19	0.317	0.39	0.14125	0.137	0.21325	0.65225	
216 VSAT	0	0	0	0	0.545	0.218	0.909	0.909	0.144	0.136	0.364	0.364	0.419	0.433	0.615	0.615	0.277	0.19675	0.472	0.472	
217 SAT	0.049	0.045	0.146	0.244	0.165	0.161	0.146	0.975	0.157	0.152	0.244	1	0.194	0.19	0.317	0.39	0.14125	0.137	0.21325	0.65225	
218 SAT	1	1	1	1	1	1	1	1	0.452	0.5	0.667	0.667	0.638	0.566	1	1	0.7725	0.7665	0.91675	0.91675	
219 VSAT	0	0	0	0	0.555	0.429	1	1	0.305	0.321	0.25	1	0.563	0.628	0.625	0.625	0.35575	0.3445	0.46875	0.65625	
220 SAT	0	0	0	0	0.333	0	0.5	0.5	0.167	0	0.5	0.5	0.5	0.5	0.5	0.5	0.25	0.125	0.375	0.375	
222 VSAT	0	0	0	0	0.333	0	0.5	0.5	0.167	0	0.5	0.5	0.5	0.5	0.5	0.5	0.25	0.125	0.375	0.375	
223 SAT	1	1	1	1	1	1	1	1	0.452	0.5	0.667	0.667	0.638	0.566	1	1	0.7725	0.7665	0.91675	0.91675	
224 SAT	1	1	1	1	1	1	1	1	0.452	0.5	0.667	0.667	0.638	0.566	1	1	0.7725	0.7665	0.91675	0.91675	
225 BS	1	1	1	1	1	1	1	1	0.452	0.5	0.667	0.667	0.638	0.566	1	1	0.7725	0.7665	0.91675	0.91675	
226 SAT	1	1	1	1	1	1	1	1	0.452	0.5	0.667	0.667	0.638	0.566	1	1	0.7725	0.7665	0.91675	0.91675	
227 SAT	1	1	1	1	1	1	1	1	0.452	0.5	0.667	0.667	0.638	0.566	1	1	0.7725	0.7665	0.91675	0.91675	
228 VSAT	1	1	1	1	1	1	1	1	0.452	0.5	0.667	0.667	0.638	0.566	1	1	0.7725	0.7665	0.91675	0.91675	
229 BS	0.049	0.045	0.146	0.244	0.165	0.161	0.146	0.975	0.157	0.152	0.244	1	0.194	0.19	0.317	0.39	0.14125	0.137	0.21325	0.65225	
232 GOOD	1	1	1	1	1	1	1	1	0.452	0.5	0.667	0.667	0.638	0.566	1	1	0.7725	0.7665	0.91675	0.91675	
233 VSAT	1	1	1	1	1	1	1	1	0.452	0.5	0.667	0.667	0.638	0.566	1	1	0.7725	0.7665	0.91675	0.91675	
234 VSAT	1	1	1	1	1	1	1	1	0.452	0.5	0.667	0.667	0.638	0.566	1	1	0.7725	0.7665	0.91675	0.91675	
235 VSAT	1	1	1	1	1	1	1	1	0.452	0.5	0.667	0.667	0.638	0.566	1	1	0.7725	0.7665	0.91675	0.91675	
236 GOOD	1	1	1	1	1	1	1	1	0.452	0.5	0.667	0.667									

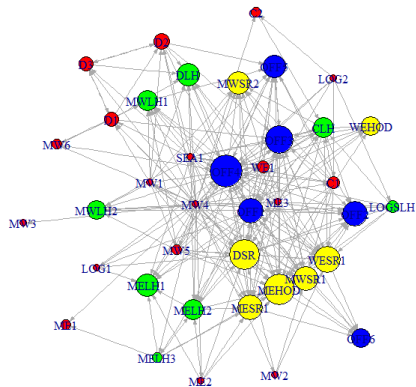




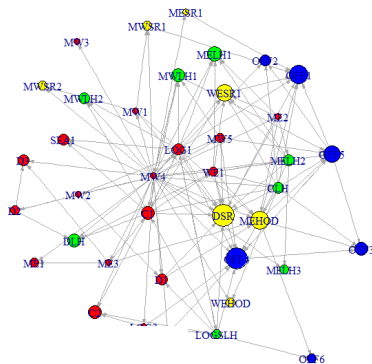
Serial	Assessment	Density(Sport)	D-L(Sport)	Leader Prestige (Sport)	Highest Non-leader Prestige (Sport)	Density (Social)	D-L(Social)	Leader Prestige (Social)	Highest Non-leader Prestige (Social)	Density (Personal)	D-L(Personal)	Leader Prestige (Personal)	Highest Non-leader Prestige (Personal)	Density (Professional)	D-L(Professional)	Leader Prestige (Professional)	Highest Non-leader Prestige (Professional)	Density (Combined)	D-L(Combined)	Leader Prestige (Combined)	Highest Non-leader Prestige (Combined)
348	SAT	0.416	0.167	0.333	0.667	0.416	0.416	0.333	0.667	0.333	0.333	0.667	0.333	0.667	0.916	0.833	1	0.52025	0.43725	0.58325	0.75025
349	VSAT	0.1667	0.333	0.333	0.333	0.25	0	0	0	0.333	0.083	0	0.333	0.333	0.1	0.083	0.25	0.25	0.146925	0.104	0.229
350	SAT	0.202	0.184	0.167	0.357	0.088	0.066	0.095	0.167	0.09	0.09	0.286	0.381	0.217	0.206	0.023	0.571	0.14925	0.1365	0.14275	0.369
351	SAT	0.17	0.199	0	0.307	0.06	0.032	0.077	0.154	0.259	0.231	0.462	0.615	0.428	0.385	0.923	0.923	0.229	0.21175	0.3655	0.49975
352	SAT	0.083	0	0.333	0.333	0	0	0	0	0.416	0.333	1	1	0.416	0.333	1	1	0.22875	0.1665	0.58325	0.58325
353	SAT	0.301	0.311	0.25	1	0.006	0.016	0.083	0.083	0.115	0.121	0.083	0.25	0.275	0.25	0.583	0.75	0.17425	0.1745	0.24975	0.52075
354	BS	0.301	0.311	0.25	1	0.006	0.016	0.083	0.083	0.115	0.121	0.083	0.25	0.275	0.25	0.583	0.75	0.17425	0.1745	0.24975	0.52075
355	SAT	0.301	0.311	0.25	1	0.006	0.016	0.083	0.083	0.115	0.121	0.083	0.25	0.275	0.25	0.583	0.75	0.17425	0.1745	0.24975	0.52075
356	VSAT	0.333	0	0.5	0.5	0.833	1	0.5	1	0.167	0.5	0	0.5	0.5	0.5	0	1	0.45825	0.5	0.25	0.75
357	BS	0.45	0.583	0	0.75	0.8	0.75	0.75	1	0.6	0.667	0.75	1	0.65	0.75	0.75	1	0.625	0.6875	0.5625	0.9375
358	SAT	0.167	0.196	0.125	0.25	0.458	0.518	0.5	0.625	0.25	0.25	0.5	0.5	0.542	0.571	0.625	0.75	0.35425	0.38375	0.4375	0.53125
359	VSAT	0.083	0	0	0.333	0.181	0	0.333	0.333	0.083	0	0	0.333	0.5	0.667	0.667	0.667	0.21175	0.16675	0.25	0.4165
361	VSAT	0.083	0	0	0.333	0.181	0	0.333	0.333	0.083	0	0	0.333	0.5	0.667	0.667	0.667	0.21175	0.16675	0.25	0.4165
362	SAT	0.45	0.583	0	0.75	0.8	0.75	0.75	1	0.6	0.667	0.75	1	0.65	0.75	0.75	1	0.625	0.6875	0.5625	0.9375
363	SAT	0.45	0.583	0	0.75	0.8	0.75	0.75	1	0.6	0.667	0.75	1	0.65	0.75	0.75	1	0.625	0.6875	0.5625	0.9375
364	SAT	0.45	0.583	0	0.75	0.8	0.75	0.75	1	0.6	0.667	0.75	1	0.65	0.75	0.75	1	0.625	0.6875	0.5625	0.9375
365	SAT	0.45	0.583	0	0.75	0.8	0.75	0.75	1	0.6	0.667	0.75	1	0.65	0.75	0.75	1	0.625	0.6875	0.5625	0.9375
366	GOOD	0.083	0	0	0.333	0.181	0	0.333	0.333	0.083	0	0	0.333	0.5	0.667	0.667	0.667	0.21175	0.16675	0.25	0.4165
367	VSAT	0.45	0.583	0	0.75	0.8	0.75	0.75	1	0.6	0.667	0.75	1	0.65	0.75	0.75	1	0.625	0.6875	0.5625	0.9375
368	VSAT	0.167	0.196	0.125	0.25	0.458	0.518	0.5	0.625	0.25	0.25	0.5	0.5	0.542	0.571	0.625	0.75	0.35425	0.38375	0.4375	0.53125
369	SAT	0.45	0.583	0	0.75	0.8	0.75	0.75	1	0.6	0.667	0.75	1	0.65	0.75	0.75	1	0.625	0.6875	0.5625	0.9375
370	SAT	0.45	0.583	0	0.75	0.8	0.75	0.75	1	0.6	0.667	0.75	1	0.65	0.75	0.75	1	0.625	0.6875	0.5625	0.9375
371	SAT	0.083	0	0	0.333	0.181	0	0.333	0.333	0.083	0	0	0.333	0.5	0.667	0.667	0.667	0.21175	0.16675	0.25	0.4165
372	SAT	0.45	0.583	0	0.75	0.8	0.75	0.75	1	0.6	0.667	0.75	1	0.65	0.75	0.75	1	0.625	0.6875	0.5625	0.9375
373	SAT	0.45	0.583	0	0.75	0.8	0.75	0.75	1	0.6	0.667	0.75	1	0.65	0.75	0.75	1	0.625	0.6875	0.5625	0.9375

# Project 2 – Sociograms (MCM 1\_4)

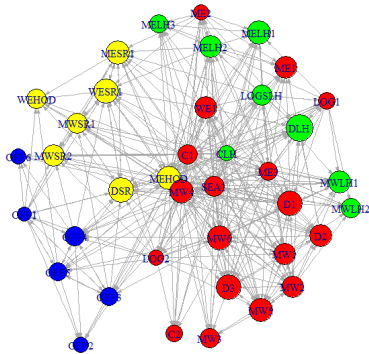
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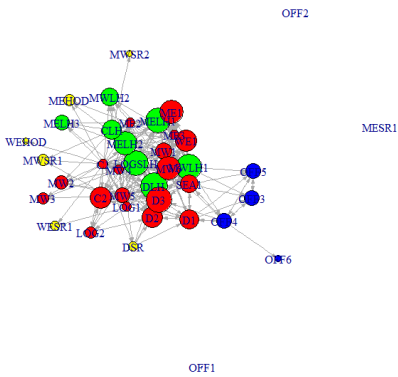
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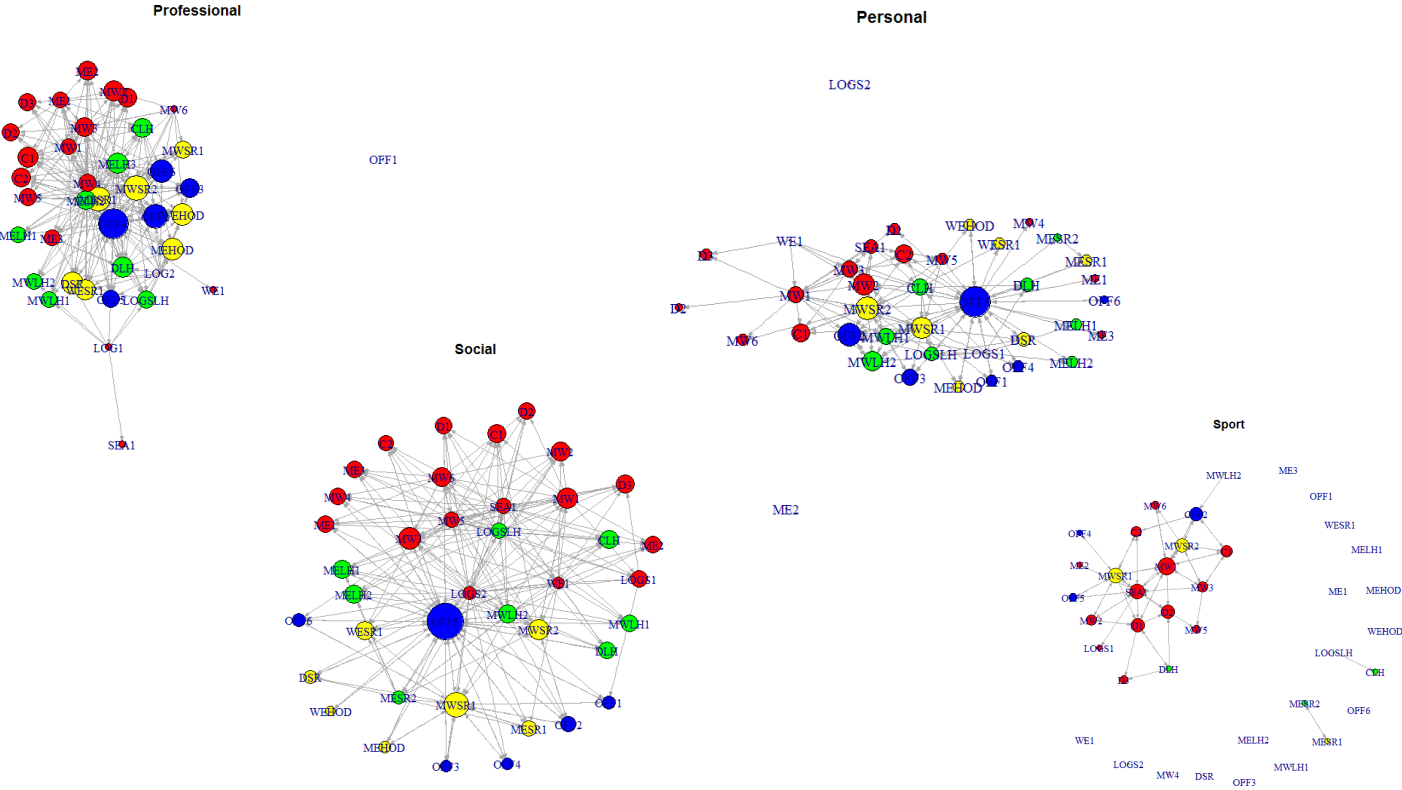
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Sport

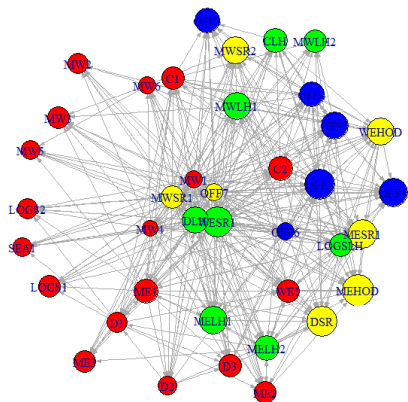


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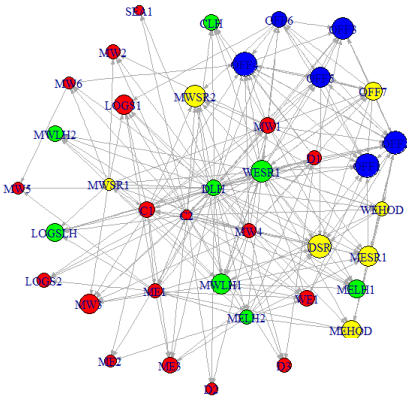


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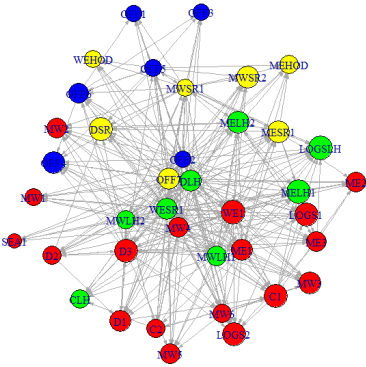
Professional



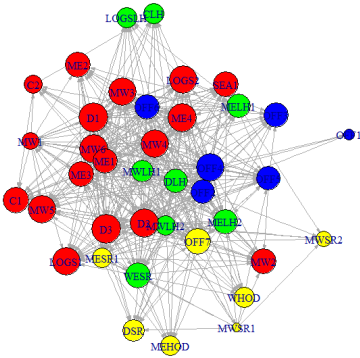
Personal



Social

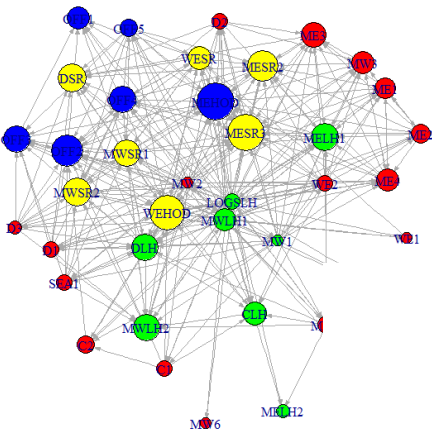


Sport

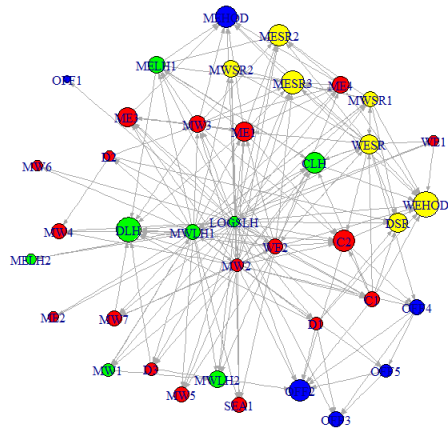


## Project 2 – Sociograms (MCM 2\_2)

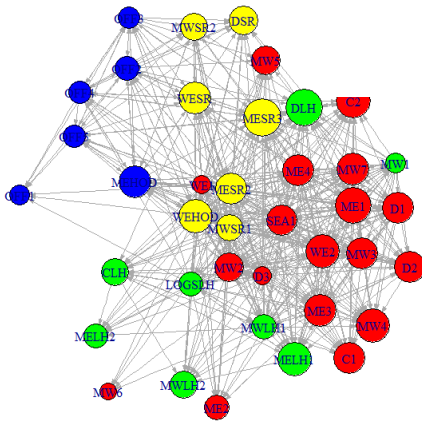
## Professional



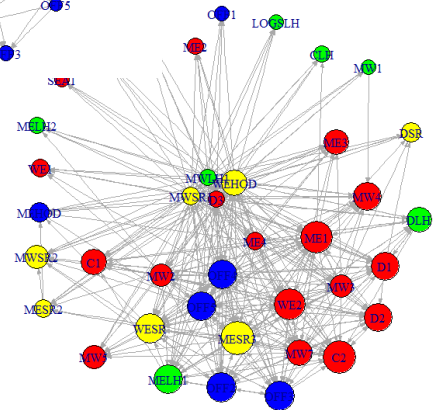
## Personal



## Social

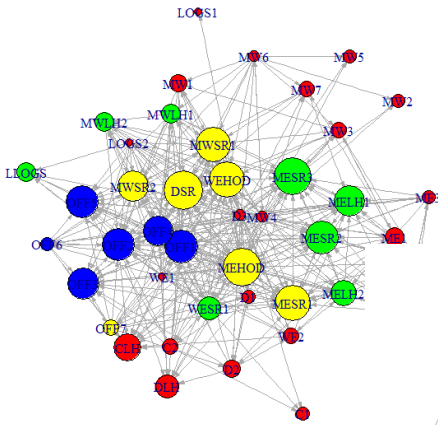


## Sports

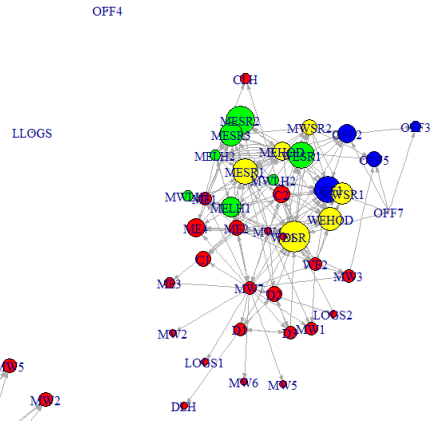


## Project 2 Sociograms (MCM 2\_4)

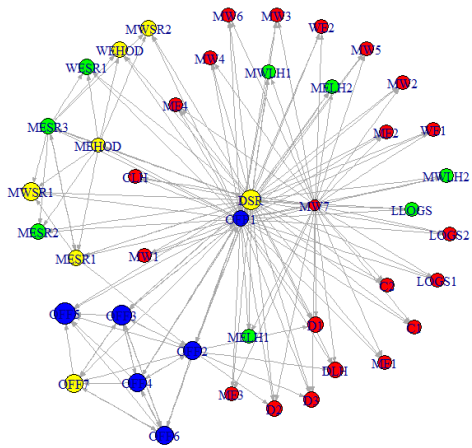
## Professional



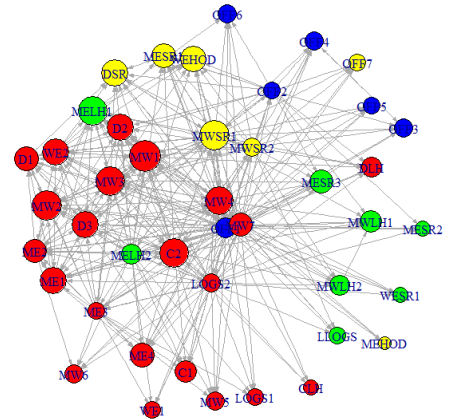
## Persona



## Social

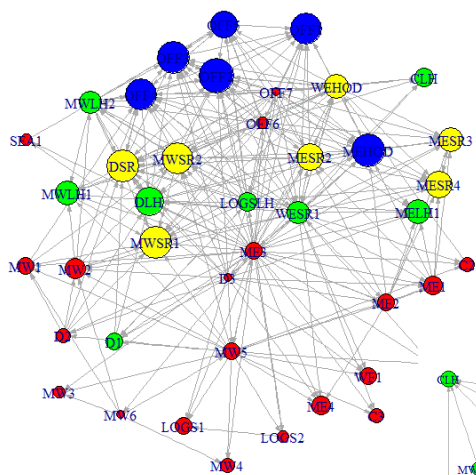


## Sport

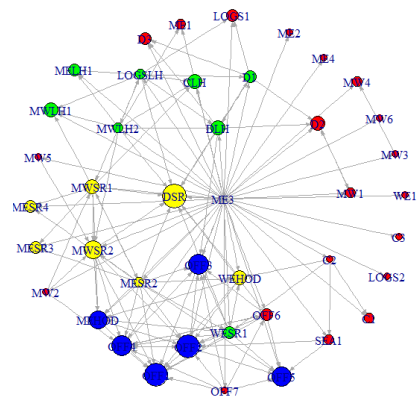


## Project 2 Sociograms (MCM 2\_5)

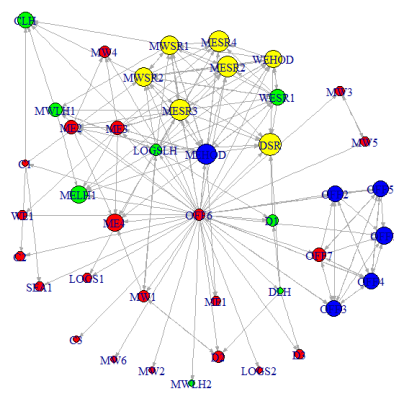
## Professional



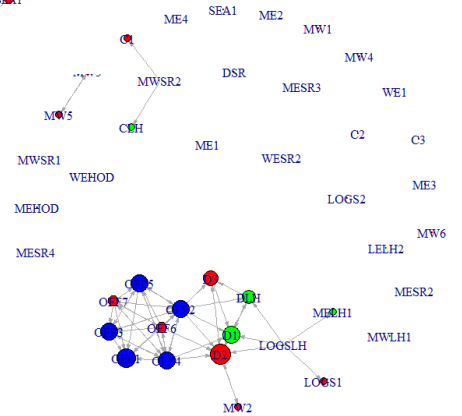
## Persona



## Socia

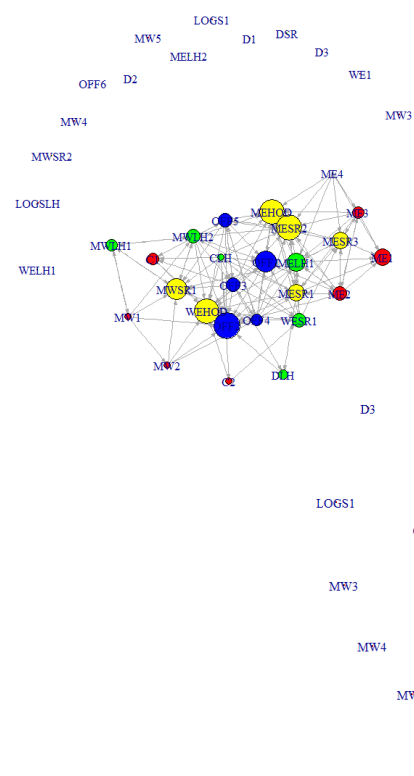


Sport

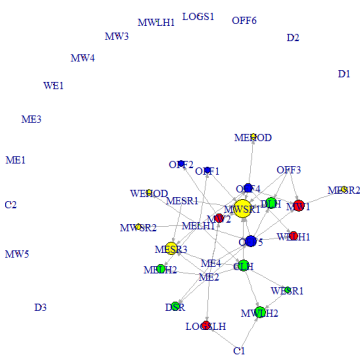


# Project 2 Sociograms (MCM 2\_7)

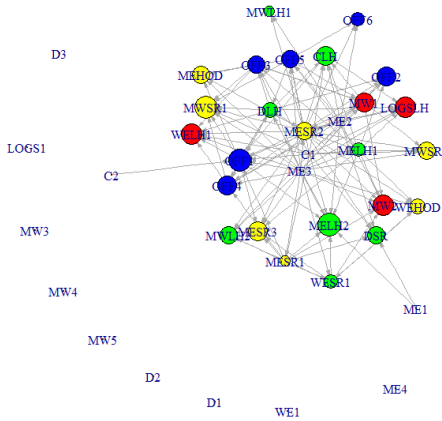
Professional



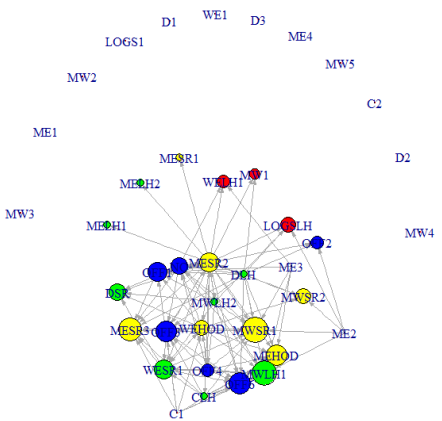
Personal



Social



Sport





## Appendix C

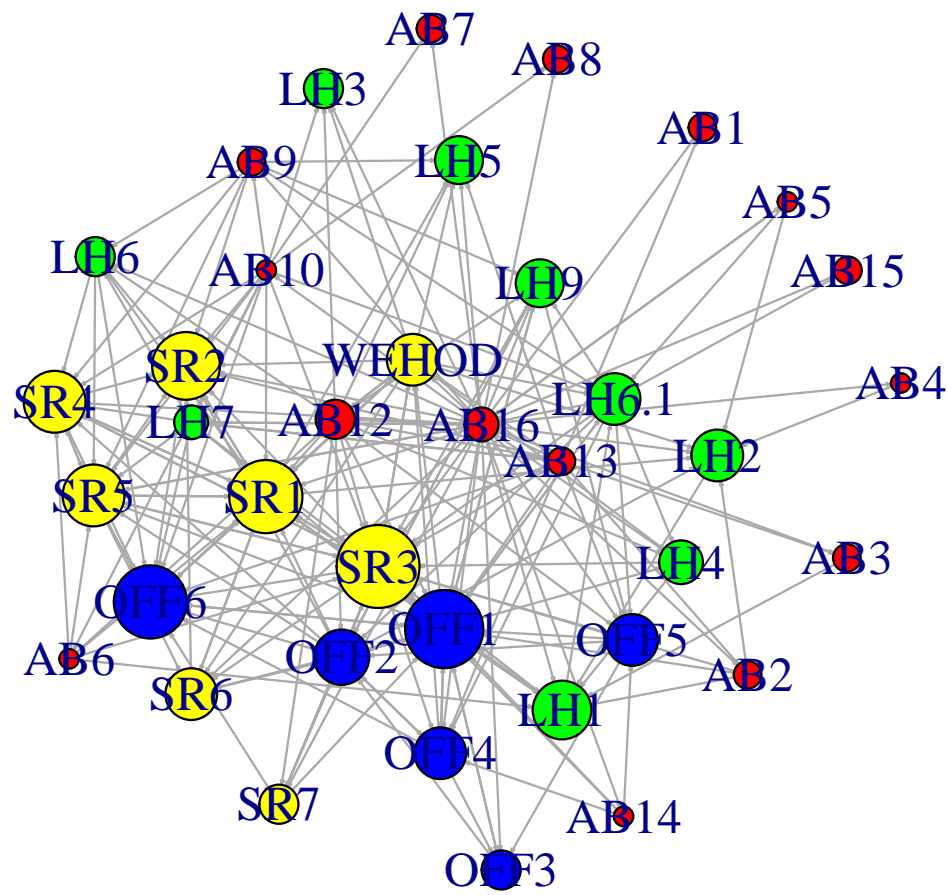
### Project 3 - Dataset

Origin node	Receiver node	Success (Y/N)	Professional prestige (origin)	Professional prestige (receiver)	Professional prestige (mean)	Personal prestige (origin)	Personal prestige (receiver)	Personal prestige (mean)	Sport prestige (origin)	Sport prestige (receiver)	Sport prestige (mean)	Social prestige (origin)	Social prestige (receiver)	Social prestige (mean)
OFF2	OFF6	0	0.205	0.359	0.282	0.051	0.179	0.115	0.051	0.077	0.064	0.128	0.154	0.141
SR1	SR5	1	0.359	0.256	0.308	0.154	0.179	0.167	0.077	0.077	0.077	0.179	0.359	0.269
SR3	OFF2	1	0.462	0.205	0.333	0.128	0.154	0.141	0.128	0.051	0.090	0.256	0.128	0.192
AB15	OFF4	0	0.051	0.179	0.115	0.026	0.077	0.051	0.077	0.051	0.064	0.282	0.128	0.205
SR3	OFF1	1	0.462	0.308	0.385	0.128	0.308	0.218	0.128	0.051	0.090	0.256	0.128	0.192
SR3	OFF6	1	0.462	0.359	0.410	0.128	0.179	0.154	0.128	0.077	0.103	0.256	0.154	0.205
AB10	OFF6	1	0.026	0.359	0.192	0.026	0.179	0.103	0.154	0.077	0.115	0.231	0.154	0.192
LH6	SR5	1	0.103	0.256	0.179	0.077	0.179	0.128	0.154	0.128	0.141	0.128	0.359	0.244
SR5	OFF6	1	0.256	0.359	0.308	0.179	0.179	0.179	0.128	0.077	0.103	0.359	0.154	0.256
SR6	WEHOD	0	0.179	0.179	0.179	0.128	0.051	0.090	0.077	0.051	0.064	0.231	0.154	0.192
AB11	AB10	0	0.000	0.026	0.013	0.000	0.026	0.013	0.077	0.154	0.115	0.154	0.231	0.192
AB12	WEHOD	1	0.103	0.179	0.141	0.051	0.051	0.051	0.103	0.051	0.077	0.256	0.154	0.205
SR3	SR1	1	0.462	0.359	0.410	0.128	0.154	0.141	0.128	0.077	0.103	0.256	0.179	0.218
OFF3	AB13	0	0.103	0.051	0.077	0.026	0.026	0.026	0.051	0.103	0.077	0.128	0.179	0.154
OFF3	LH2	1	0.103	0.179	0.141	0.026	0.051	0.038	0.051	0.077	0.064	0.128	0.128	0.128
LH8	AB2	0	0.179	0.051	0.115	0.154	0.051	0.103	0.103	0.179	0.141	0.333	0.282	0.308
SR5	LH9	0	0.256	0.154	0.205	0.179	0.205	0.192	0.128	0.179	0.154	0.359	0.282	0.321
LH9	AB5	0	0.154	0.026	0.090	0.205	0.051	0.128	0.179	0.051	0.115	0.282	0.154	0.218
AB11	LH5	1	0.000	0.154	0.077	0.000	0.103	0.051	0.077	0.077	0.077	0.154	0.282	0.218
AB8	OFF6	0	0.051	0.359	0.205	0.051	0.179	0.115	0.154	0.077	0.115	0.231	0.154	0.192
OFF2	OFF6	1	0.205	0.359	0.282	0.154	0.179	0.167	0.051	0.077	0.064	0.128	0.154	0.141
SR1	LH2	1	0.359	0.179	0.269	0.154	0.051	0.103	0.077	0.077	0.077	0.179	0.128	0.154
SR4	OFF6	1	0.256	0.359	0.308	0.205	0.179	0.192	0.154	0.077	0.115	0.359	0.154	0.256
SR4	LH6	1	0.256	0.103	0.179	0.205	0.077	0.141	0.154	0.154	0.154	0.359	0.128	0.244
SR1	AB15	1	0.359	0.051	0.205	0.154	0.026	0.090	0.077	0.077	0.077	0.179	0.282	0.231
AB13	AB4	0	0.051	0.026	0.038	0.026	0.026	0.026	0.103	0.077	0.090	0.179	0.231	0.205
LH1	LH3	0	0.231	0.103	0.167	0.077	0.051	0.064	0.051	0.128	0.090	0.154	0.231	0.192
SR4	LH7	1	0.256	0.077	0.167	0.205	0.026	0.115	0.154	0.103	0.128	0.359	0.256	0.308
OFF3	LH1	1	0.103	0.231	0.167	0.026	0.077	0.051	0.051	0.051	0.051	0.128	0.154	0.141
AB10	OFF6	0	0.026	0.359	0.192	0.026	0.179	0.103	0.154	0.077	0.115	0.231	0.154	0.192
OFF1	OFF2	1	0.410	0.205	0.308	0.308	0.154	0.231	0.051	0.051	0.051	0.128	0.128	0.128
OFF1	OFF3	1	0.410	0.103	0.256	0.308	0.026	0.167	0.051	0.051	0.051	0.128	0.128	0.128
OFF1	OFF4	1	0.410	0.179	0.295	0.308	0.077	0.192	0.051	0.051	0.051	0.128	0.128	0.128
OFF1	OFF5	1	0.410	0.179	0.295	0.308	0.205	0.256	0.051	0.077	0.064	0.128	0.154	0.141
OFF1	OFF6	1	0.410	0.359	0.385	0.308	0.179	0.244	0.051	0.077	0.064	0.128	0.154	0.141
OFF6	SR1	1	0.359	0.359	0.359	0.308	0.154	0.231	0.077	0.077	0.077	0.154	0.179	0.167
SR1	SR2	1	0.359	0.462	0.410	0.154	0.179	0.167	0.077	0.077	0.077	0.179	0.231	0.205
SR1	WEHOD	0	0.359	0.179	0.269	0.154	0.051	0.103	0.077	0.051	0.064	0.179	0.154	0.167
SR1	SR3	1	0.359	0.462	0.410	0.154	0.128	0.141	0.077	0.128	0.103	0.179	0.256	0.218
SR1	SR4	1	0.359	0.256	0.308	0.154	0.205	0.179	0.077	0.077	0.077	0.179	0.359	0.269
SR1	SR5	1	0.359	0.256	0.308	0.154	0.179	0.167	0.077	0.128	0.103	0.179	0.359	0.269
SR1	SR6	1	0.359	0.179	0.269	0.154	0.128	0.141	0.077	0.077	0.077	0.179	0.231	0.205
SR1	SR7	1	0.359	0.103	0.231	0.154	0.026	0.090	0.077	0.077	0.077	0.179	0.128	0.154
SR1	LH1	1	0.359	0.231	0.295	0.154	0.077	0.115	0.077	0.051	0.064	0.179	0.154	0.167
SR1	LH2	1	0.359	0.179	0.269	0.154	0.051	0.103	0.077	0.077	0.077	0.179	0.128	0.154
SR1	LH3	0	0.359	0.103	0.231	0.154	0.051	0.103	0.077	0.128	0.103	0.179	0.231	0.205
SR1	LH4	0	0.359	0.128	0.244	0.154	0.077	0.115	0.077	0.128	0.103	0.179	0.103	0.141
SR1	LH5	1	0.359	0.154	0.256	0.154	0.103	0.128	0.077	0.077	0.077	0.179	0.282	0.231
SR1	LH6	1	0.359	0.103	0.231	0.154	0.077	0.115	0.077	0.154	0.115	0.179	0.128	0.154
SR1	LH7	0	0.359	0.077	0.218	0.154	0.026	0.090	0.077	0.103	0.090	0.179	0.256	0.218
SR1	LH8	1	0.359	0.179	0.269	0.154	0.154	0.154	0.077	0.103	0.090	0.179	0.333	0.256
SR1	LH9	1	0.359	0.154	0.256	0.154	0.205	0.179	0.077	0.179	0.128	0.179	0.282	0.231
AB13	AB1	0	0.051	0.051	0.051	0.026	0.077	0.051	0.103	0.077	0.090	0.179	0.179	0.179
AB13	AB2	0	0.051	0.051	0.051	0.026	0.051	0.038	0.103	0.179	0.141	0.179	0.282	0.231
AB13	AB3	0	0.051	0.051	0.051	0.026	0.103	0.064	0.103	0.103	0.103	0.179	0.205	0.192
AB13	AB4	0	0.051	0.026	0.038	0.026	0.026	0.026	0.103	0.077	0.090	0.179	0.231	0.205
AB13	AB5	0	0.051	0.026	0.038	0.026	0.051	0.038	0.103	0.051	0.077	0.179	0.154	0.167
AB13	AB6	0	0.051	0.026	0.038	0.026	0.051	0.038	0.103	0.051	0.077	0.179	0.205	0.192
AB13	AB7	0	0.051	0.051	0.051	0.026	0.128	0.077	0.103	0.179	0.141	0.179	0.282	0.231
AB13	AB8	0	0.051	0.051	0.051	0.026	0.051	0.038	0.103	0.154	0.128	0.179	0.231	0.205
AB13	AB9	0	0.051	0.051	0.051	0.026	0.077	0.051	0.103	0.154	0.128	0.179	0.256	0.218
AB13	AB10	0	0.051	0.026	0.038	0.026	0.026	0.026	0.103	0.154	0.128	0.179	0.231	0.205
AB13	AB11	0	0.051	0.000	0.026	0.026	0.000	0.013	0.103	0.077	0.090	0.179	0.154	0.167
AB13	AB12	0	0.051	0.103	0.077	0.026	0.051	0.038	0.103	0.103	0.103	0.179	0.256	0.218
AB13	AB14	0	0.051	0.026	0.038	0.026	0.026	0.026	0.103	0.103	0.103	0.179	0.256	0.218
AB13	AB15	0	0.051	0.051	0.051	0.026	0.026	0.026	0.103	0.077	0.090	0.179	0.282	0.231
AB13	AB16	1	0.051	0.077	0.064	0.026	0.026	0.026	0.103	0.077	0.090	0.179	0.205	0.192
SR7	AB15	0	0.103	0.051	0.077	0.026	0.026	0.026	0.077	0.077	0.077	0.128	0.282	0.205
OFF1	OFF2	1	0.410	0.205	0.308	0.308	0.154	0.231	0.051	0.051	0.051	0.128	0.128	0.128
OFF1	OFF3	1	0.410	0.103	0.256	0.308	0.026	0.167	0.051	0.051	0.051	0.128	0.128	0.128
OFF1	OFF4	1	0.410	0.179	0.295	0.308	0.077	0.192	0.051	0.051	0.051	0.128	0.128	0.128
OFF1	OFF5	1	0.410	0.179	0.295	0.308	0.205	0.256	0.051	0.077	0.064	0.128	0.154	0.141
OFF1	OFF6	1	0.410	0.359	0.385	0.308	0.179	0.244	0.051	0.077	0.064	0.128	0.154	0.141

Origin node	Receiver node	Success (Y/N)	Professional prestige (origin)	Professional prestige (receiver)	Professional prestige (mean)	Personal prestige (origin)	Personal prestige (receiver)	Personal prestige (mean)	Sport prestige (origin)	Sport prestige (receiver)	Sport prestige (mean)	Social prestige (origin)	Social prestige (receiver)	Social prestige (mean)
SR1	SR2	1	0.359	0.308	0.333	0.154	0.179	0.167	0.077	0.077	0.077	0.179	0.231	0.205
SR2	WEHOD	1	0.308	0.179	0.244	0.179	0.051	0.115	0.103	0.051	0.077	0.231	0.154	0.192
SR2	SR3	1	0.308	0.462	0.385	0.179	0.128	0.154	0.103	0.128	0.115	0.231	0.256	0.244
SR1	SR4	1	0.359	0.256	0.308	0.154	0.205	0.179	0.077	0.077	0.077	0.179	0.359	0.269
SR1	SR5	1	0.359	0.256	0.308	0.154	0.179	0.167	0.077	0.128	0.103	0.179	0.359	0.269
SR1	SR6	1	0.359	0.179	0.269	0.154	0.128	0.141	0.077	0.077	0.077	0.179	0.231	0.205
SR1	SR7	0	0.359	0.103	0.231	0.154	0.026	0.090	0.077	0.077	0.077	0.179	0.128	0.154
SR7	LH1	0	0.103	0.231	0.167	0.026	0.077	0.051	0.077	0.051	0.064	0.128	0.154	0.141
SR7	LH2	0	0.103	0.179	0.141	0.026	0.051	0.038	0.077	0.077	0.077	0.128	0.128	0.128
SR1	LH3	1	0.359	0.103	0.231	0.154	0.051	0.103	0.077	0.128	0.103	0.179	0.231	0.205
LH3	LH4	0	0.103	0.128	0.115	0.051	0.077	0.064	0.128	0.128	0.128	0.231	0.103	0.167
LH3	LH5	0	0.103	0.154	0.128	0.051	0.103	0.077	0.128	0.077	0.103	0.231	0.282	0.256
LH3	LH6	0	0.103	0.103	0.103	0.051	0.077	0.064	0.128	0.154	0.141	0.231	0.128	0.179
LH3	LH7	0	0.103	0.077	0.090	0.051	0.026	0.038	0.128	0.103	0.115	0.231	0.256	0.244
SR2	LH8	1	0.308	0.179	0.244	0.179	0.154	0.167	0.103	0.103	0.103	0.231	0.333	0.282
SR2	LH9	1	0.308	0.154	0.231	0.179	0.205	0.192	0.103	0.179	0.141	0.231	0.282	0.256
AB11	AB1	0	0.000	0.051	0.026	0.000	0.077	0.038	0.077	0.077	0.077	0.154	0.179	0.167
AB11	AB2	0	0.000	0.051	0.026	0.000	0.051	0.026	0.077	0.179	0.128	0.154	0.282	0.218
AB11	AB3	0	0.000	0.051	0.026	0.000	0.103	0.051	0.077	0.103	0.090	0.154	0.205	0.179
AB11	AB4	0	0.000	0.026	0.013	0.000	0.026	0.013	0.077	0.077	0.077	0.154	0.231	0.192
AB11	AB5	0	0.000	0.026	0.013	0.000	0.051	0.026	0.077	0.051	0.064	0.154	0.154	0.154
AB11	AB6	0	0.000	0.026	0.013	0.000	0.051	0.026	0.077	0.051	0.064	0.154	0.205	0.179
AB11	AB7	0	0.000	0.051	0.026	0.000	0.128	0.064	0.077	0.179	0.128	0.154	0.282	0.218
AB11	AB8	0	0.000	0.051	0.026	0.000	0.051	0.026	0.077	0.154	0.115	0.154	0.231	0.192
AB11	AB9	0	0.000	0.051	0.026	0.000	0.077	0.038	0.077	0.154	0.115	0.154	0.256	0.205
AB11	AB10	0	0.000	0.026	0.013	0.000	0.026	0.013	0.077	0.154	0.115	0.154	0.231	0.192
AB11	AB12	0	0.000	0.103	0.051	0.000	0.051	0.026	0.077	0.103	0.090	0.154	0.256	0.205
AB11	AB13	0	0.000	0.051	0.026	0.000	0.026	0.013	0.077	0.103	0.090	0.154	0.179	0.167
AB11	AB14	0	0.000	0.026	0.013	0.000	0.026	0.013	0.077	0.103	0.090	0.154	0.256	0.205
AB11	AB15	0	0.000	0.051	0.026	0.000	0.026	0.013	0.077	0.077	0.077	0.154	0.282	0.218
AB11	AB16	0	0.000	0.077	0.038	0.000	0.026	0.013	0.077	0.077	0.077	0.154	0.205	0.179
OFF2	OFF6	0	0.103	0.667	0.385	0.154	0.256	0.205	0.128	0.154	0.141	0.128	0.205	0.167
OFF2	OFF3	0	0.103	0.308	0.205	0.154	0.051	0.103	0.128	0.026	0.077	0.128	0.128	0.128
OFF2	SR1	0	0.103	0.128	0.115	0.154	0.154	0.154	0.128	0.128	0.128	0.128	0.179	0.154
OFF2	SR1	0	0.103	0.128	0.115	0.154	0.154	0.154	0.128	0.128	0.128	0.128	0.179	0.154
OFF2	SR6	0	0.103	0.205	0.154	0.154	0.128	0.141	0.128	0.128	0.128	0.128	0.231	0.179
OFF2	OFF4	0	0.103	0.231	0.167	0.154	0.154	0.154	0.128	0.077	0.103	0.128	0.128	0.128
OFF2	OFF6	0	0.103	0.667	0.385	0.154	0.256	0.205	0.128	0.154	0.141	0.128	0.205	0.167
OFF2	OFF4	1	0.103	0.231	0.167	0.154	0.154	0.154	0.128	0.077	0.103	0.128	0.128	0.128
OFF2	OFF6	0	0.103	0.667	0.385	0.154	0.256	0.205	0.128	0.154	0.141	0.128	0.205	0.167
OFF2	OFF3	0	0.103	0.308	0.205	0.154	0.051	0.103	0.128	0.026	0.077	0.128	0.128	0.128
OFF2	OFF6	0	0.103	0.667	0.282	0.154	0.256	0.205	0.128	0.154	0.141	0.128	0.205	0.167
SR1	SR5	1	0.128	0.205	0.167	0.154	0.154	0.154	0.128	0.154	0.141	0.179	0.333	0.256
SR3	OFF2	1	0.154	0.103	0.128	0.077	0.154	0.115	0.077	0.128	0.103	0.103	0.128	0.115
AB15	OFF4	0	0.103	0.231	0.167	0.077	0.154	0.115	0.103	0.077	0.090	0.205	0.128	0.167
SR3	OFF1	1	0.154	0.282	0.218	0.077	0.231	0.154	0.077	0.231	0.154	0.103	0.128	0.115
SR3	OFF6	1	0.154	0.667	0.410	0.077	0.256	0.167	0.077	0.154	0.115	0.103	0.205	0.154
AB10	OFF6	1	0.026	0.667	0.346	0.026	0.256	0.141	0.103	0.154	0.128	0.282	0.205	0.244
LH6	SR5	1	0.179	0.205	0.192	0.179	0.154	0.167	0.128	0.154	0.141	0.128	0.333	0.231
SR5	OFF6	1	0.205	0.667	0.436	0.154	0.256	0.205	0.154	0.154	0.154	0.333	0.205	0.269
SR6	SR1	0	0.205	0.128	0.167	0.128	0.154	0.141	0.128	0.128	0.128	0.231	0.179	0.205
AB11	AB10	0	0.077	0.026	0.051	0.128	0.026	0.077	0.128	0.103	0.115	0.231	0.179	0.205
AB12	SR1	0	0.103	0.128	0.115	0.077	0.154	0.115	0.103	0.128	0.115	0.231	0.179	0.205
SR3	SR1	1	0.154	0.128	0.141	0.077	0.154	0.115	0.077	0.128	0.103	0.103	0.179	0.141
OFF3	AB13	0	0.308	0.077	0.192	0.051	0.051	0.051	0.026	0.051	0.038	0.128	0.154	0.141
OFF3	LH2	1	0.308	0.205	0.256	0.051	0.077	0.064	0.026	0.103	0.064	0.128	0.205	0.167
LH6	AB2	0	0.179	0.077	0.128	0.179	0.077	0.128	0.128	0.154	0.141	0.128	0.308	0.218
SR5	LH7	0	0.205	0.179	0.192	0.154	0.103	0.128	0.154	0.103	0.128	0.333	0.282	0.308
LH9	AB5	0	0.205	0.026	0.115	0.103	0.128	0.115	0.051	0.128	0.090	0.256	0.179	0.218
AB11	LH5	0	0.077	0.231	0.154	0.128	0.103	0.115	0.128	0.103	0.115	0.231	0.333	0.282
AB8	OFF6	0	0.026	0.667	0.346	0.051	0.256	0.154	0.103	0.154	0.128	0.231	0.205	0.218
OFF2	OFF6	0	0.103	0.667	0.385	0.154	0.256	0.205	0.128	0.154	0.141	0.128	0.205	0.167
SR1	LH2	1	0.128	0.205	0.167	0.154	0.077	0.115	0.128	0.103	0.115	0.179	0.205	0.192
SR4	OFF6	1	0.308	0.667	0.487	0.231	0.256	0.244	0.154	0.154	0.154	0.256	0.205	0.231
SR4	LH6	1	0.308	0.179	0.244	0.231	0.179	0.205	0.154	0.128	0.141	0.256	0.128	0.192
SR1	AB15	1	0.128	0.103	0.115	0.154	0.077	0.115	0.128	0.103	0.115	0.179	0.205	0.192
AB13	AB4	0	0.077	0.051	0.064	0.051	0.077	0.064	0.051	0.077	0.064	0.154	0.282	0.218
LH1	LH3	0	0.154	0.154	0.154	0.179	0.103	0.141	0.179	0.128	0.154	0.359	0.179	0.269
SR4	LH7	1	0.308	0.179	0.244	0.231	0.103	0.167	0.154	0.103	0.128	0.256	0.282	0.269
OFF3	LH1	1	0.308	0.154	0.231	0.051	0.179	0.115	0.026	0.179	0.103	0.128	0.359	0.244
AB10	OFF6	0	0.026	0.667	0.346	0.026	0.256	0.141	0.103	0.154	0.128	0.282	0.205	0.244
OFF1	OFF2	1	0.282	0.103	0.192	0.231	0.154	0.192	0.231	0.128	0.179	0.128	0.128	0.128
OFF1	OFF3	1	0.282	0.308	0.295	0.231	0.051	0.141	0.231	0.026	0.128	0.128	0.128	0.128

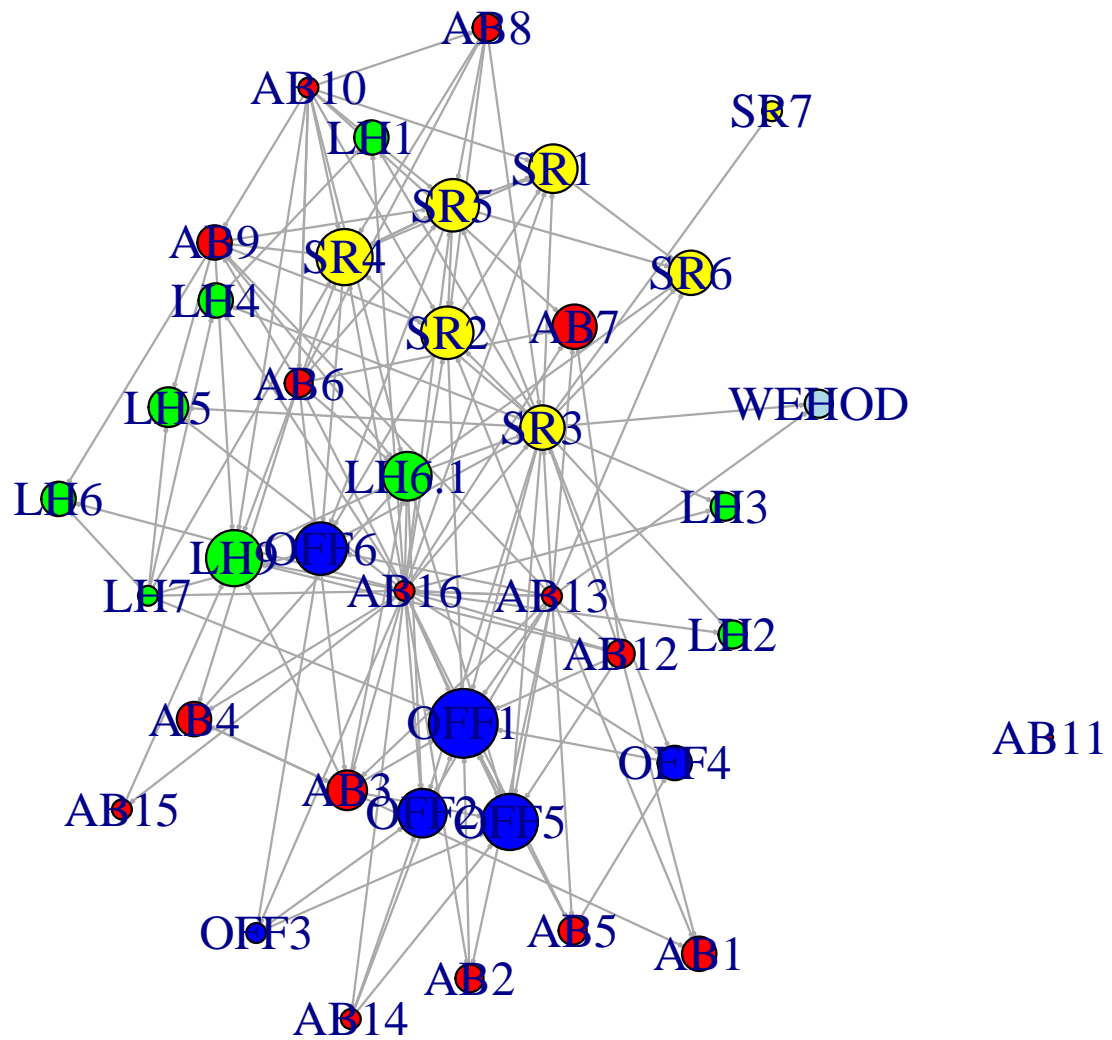
Origin node	Receiver node	Success (Y/N)	Professional prestige (origin)	Professional prestige (receiver)	Professional prestige (mean)	Personal prestige (origin)	Personal prestige (receiver)	Personal prestige (mean)	Sport prestige (origin)	Sport prestige (receiver)	Sport prestige (mean)	Social prestige (origin)	Social prestige (receiver)	Social prestige (mean)
OFF1	OFF5	1	0.282	0.077	0.179	0.231	0.256	0.244	0.231	0.231	0.231	0.128	0.205	0.167
OFF1	OFF6	1	0.282	0.667	0.474	0.231	0.256	0.244	0.231	0.154	0.192	0.128	0.205	0.167
OFF6	SR1	1	0.282	0.128	0.205	0.231	0.154	0.192	0.154	0.128	0.141	0.205	0.179	0.192
SR1	SR2	1	0.128	0.103	0.115	0.154	0.154	0.154	0.128	0.179	0.154	0.179	0.154	0.167
OFF2	SR1	0	0.103	0.128	0.115	0.154	0.154	0.154	0.128	0.128	0.128	0.128	0.179	0.154
SR1	SR3	1	0.128	0.154	0.141	0.154	0.077	0.115	0.128	0.077	0.103	0.179	0.103	0.141

# OPV1 Professional Matrix

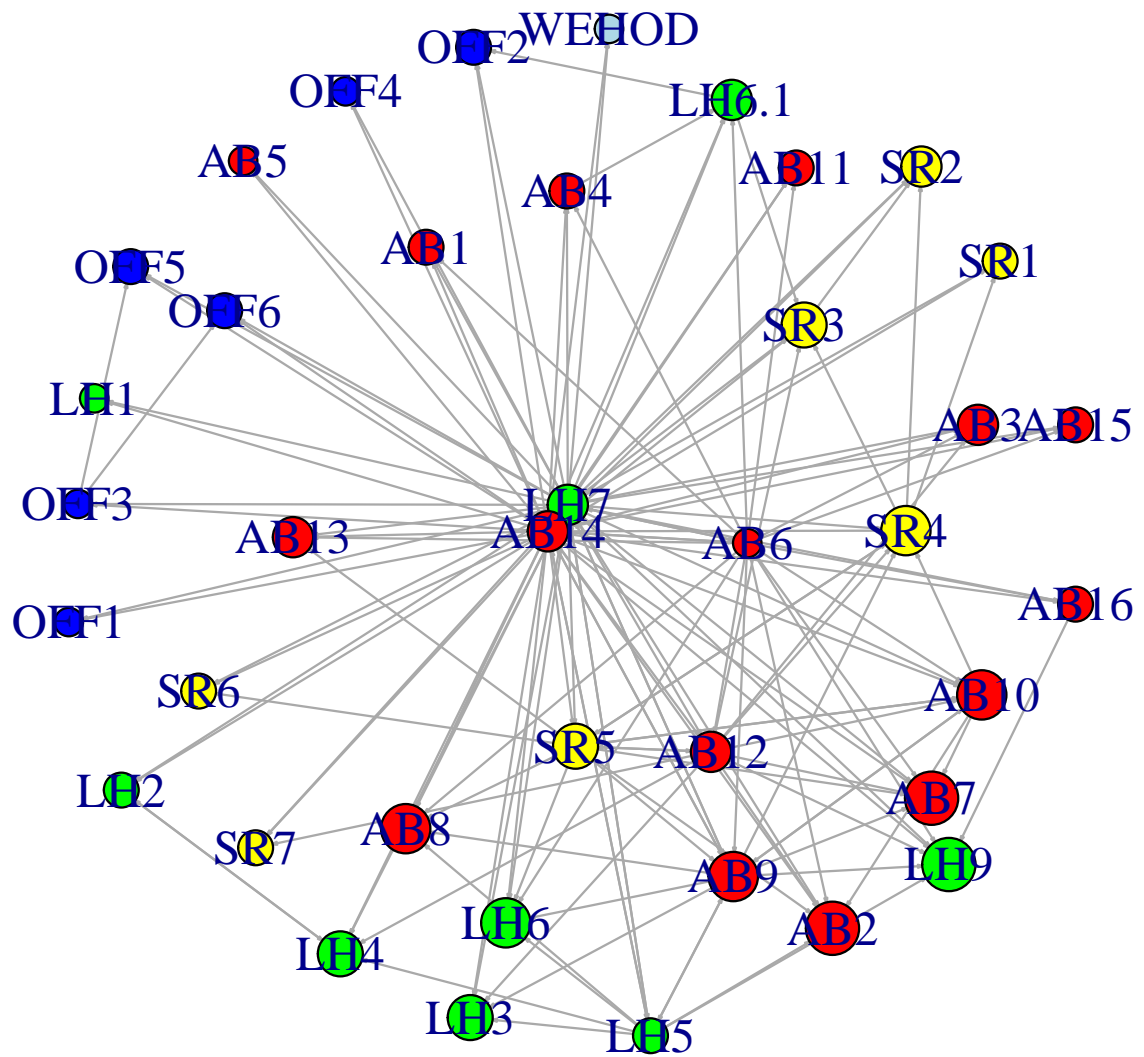


AB11

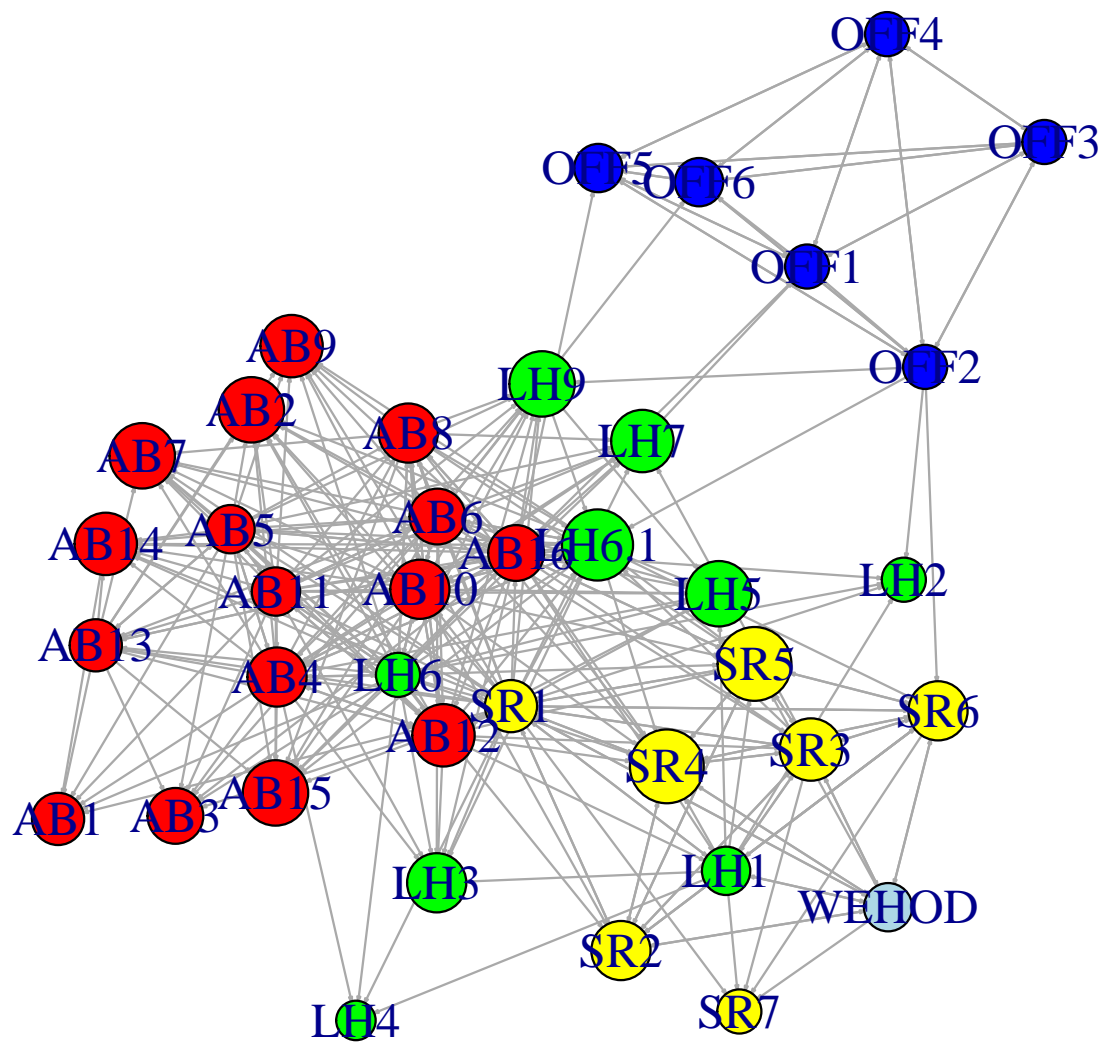
# OPV 1 Personal Matrix



# OPV1 Sports Matrix

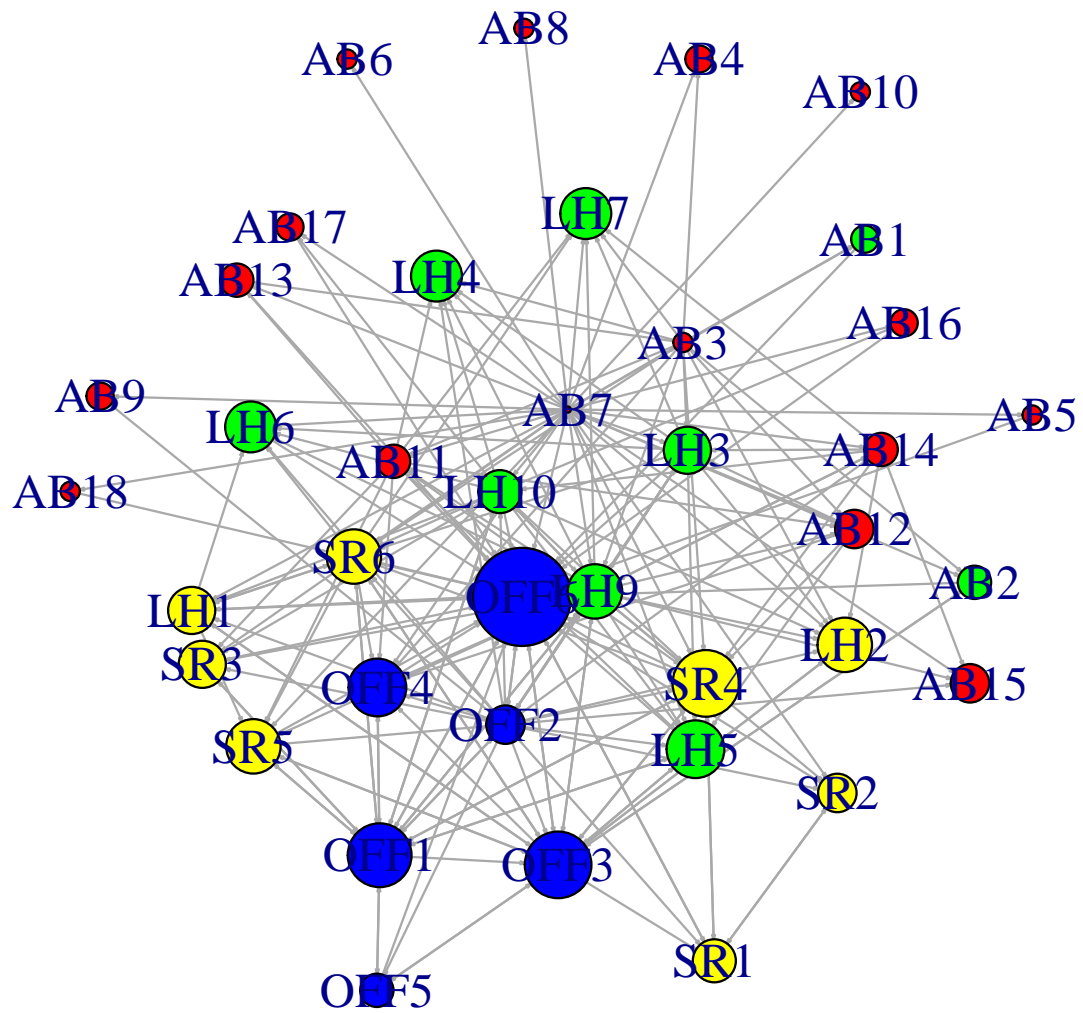


# OPV1 Social Matrix

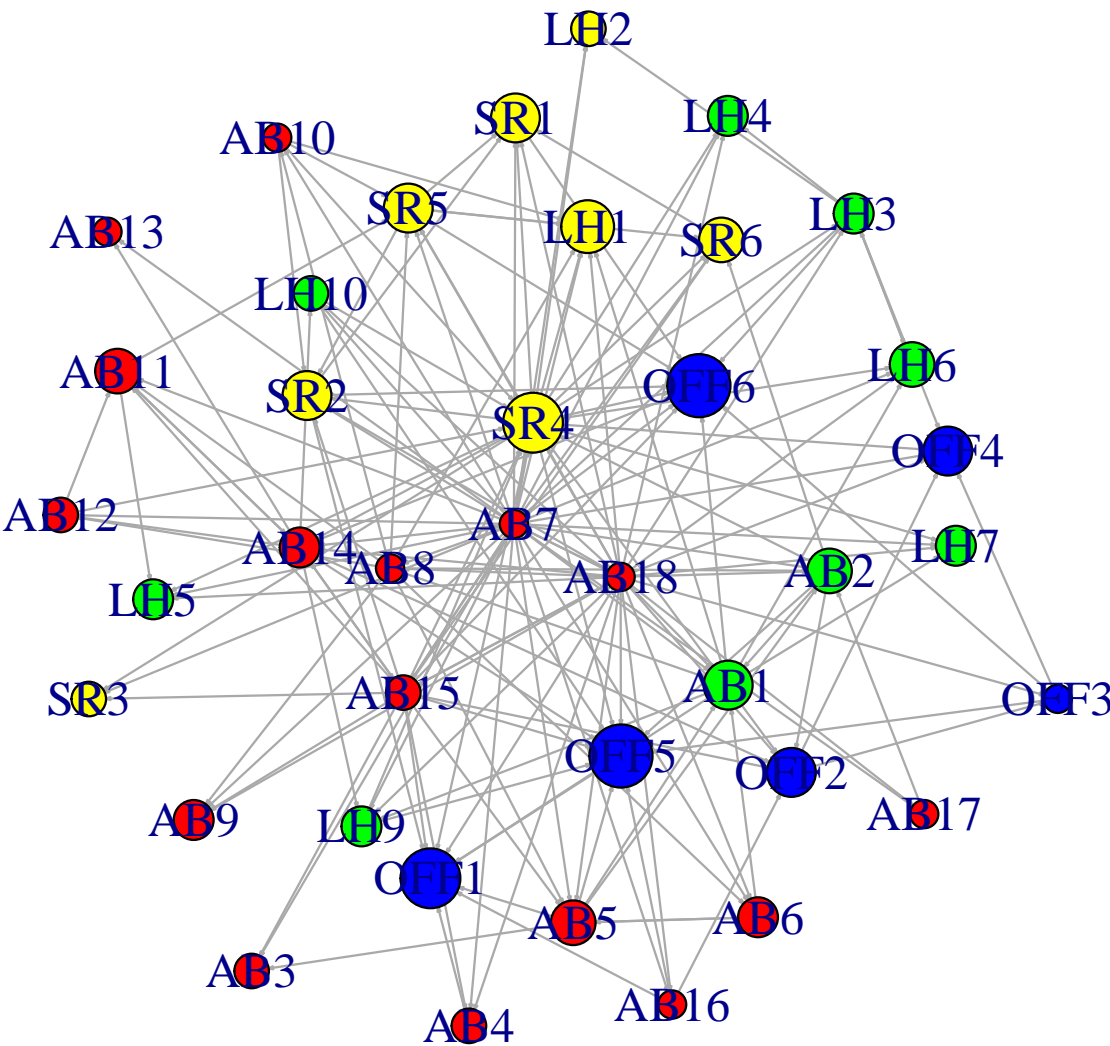




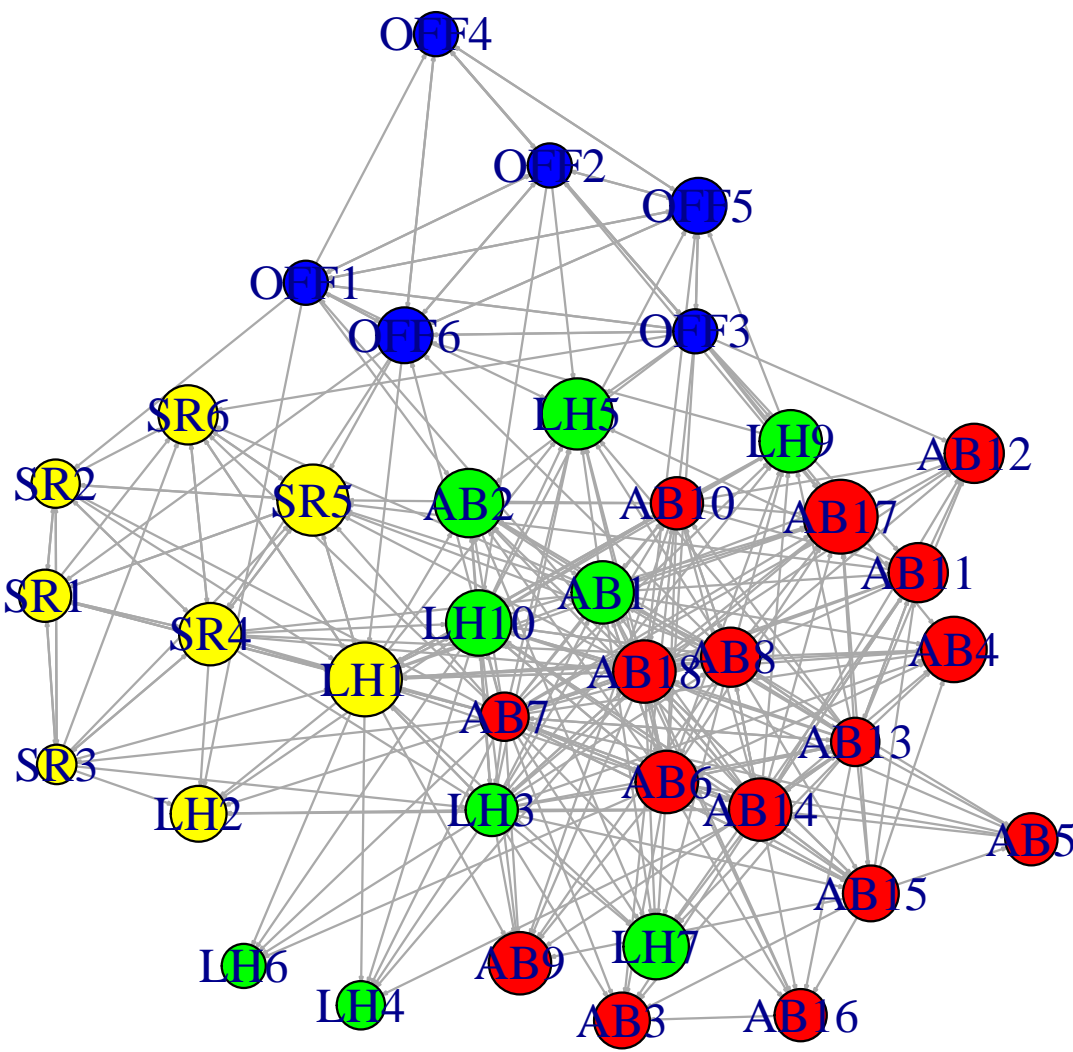
# OPV2 Professional Matrix



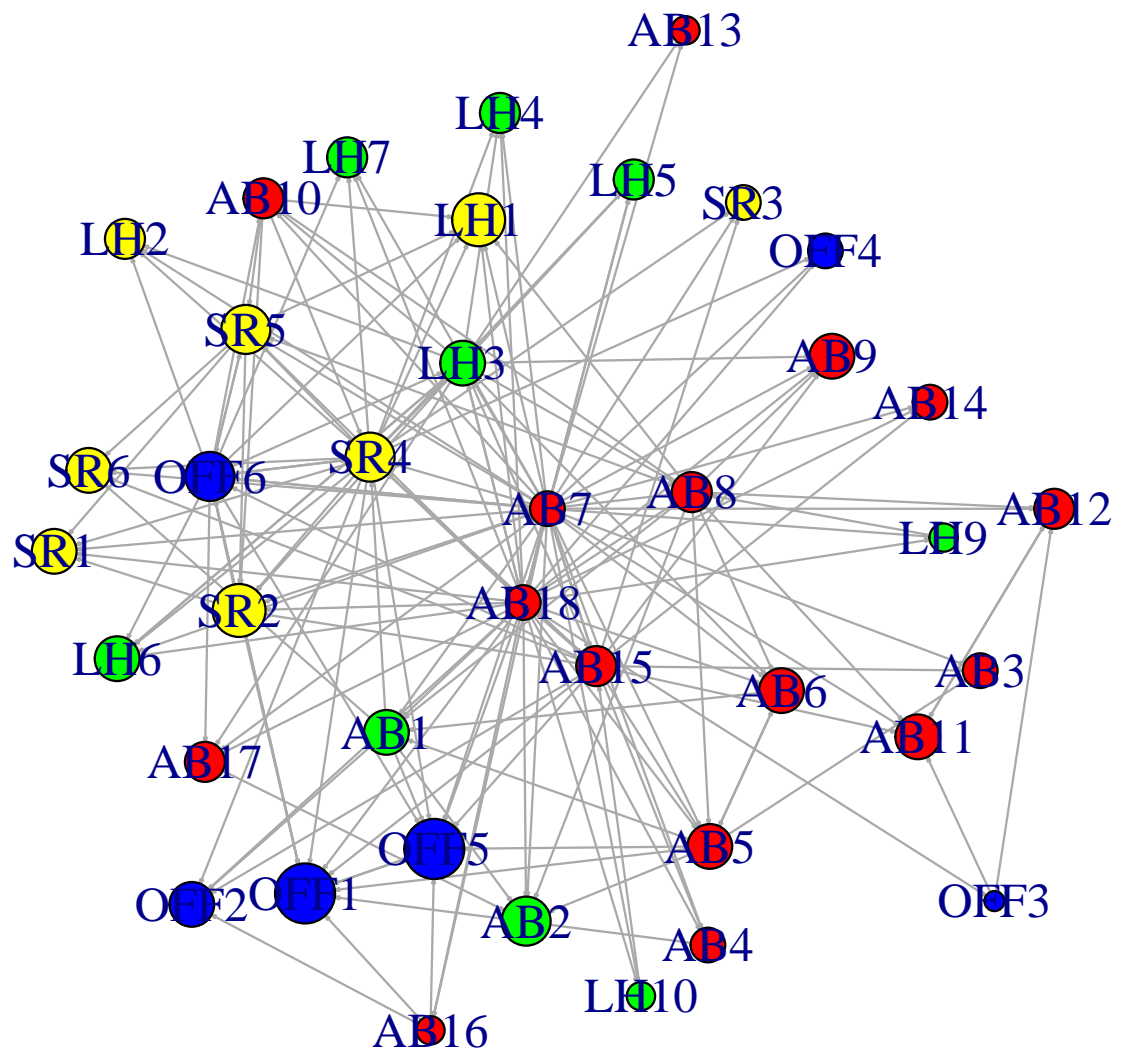
# OPV2 Personal Matrix



# OPV2 Social Matrix



# OPV2 Sports Matrix



## Import\_matrix\_igraph\_basic.R

Fri Apr 08 11:42:57 2016

```
import <- function(){
  #import matrix from clipboard and convert to graph object
  x <- read.csv(file="clipboard", sep="\t", header=TRUE, row.names=1)
  x <- as.matrix(x)
  x <- graph.adjacency(x)
  get.adjacency(x)
  #partition matrix by hierarchical level (1=Officer, 2=Head of
  Department, 3 = Senior Rate, 4=Leading Hand, 5=Able Rate)
  #Plot graph using colours to differentiate the ranks
  igraph.options(vertex.size=3, edge.arrow.size=0.1, vertex.label = V(x))
  V(x) $label <- sub("Actor ", "", V(x) $name)
  V(x) $size <- 4 * sqrt(graph.strength(x, mode="in"))
  plot(x, layout=layout.kamada.kawai)
  title(readline("Title?"))
  #Save x as R object to use in global environment
  save(x,file = "working_matrix")
}

importm <- function(){
  #import matrix from clipboard and convert to graph object
  x <- read.csv(file="clipboard", sep="\t", header=TRUE, row.names=1)
  x <- as.matrix(x)
  x <- graph.adjacency(x)
  get.adjacency(x)
  #partition matrix by hierarchical level (1=Officer, 2=Head of
  Department, 3 = Senior Rate, 4=Leading Hand, 5=Able Rate)
  V(x)[1:6]$level <- 1
  V(x)[7:8]$level <- 2
  V(x)[9:13]$level <- 3
  V(x)[14:21]$level <- 4
  V(x)[22:43]$level <- 5
  #Plot graph using colours to differentiate the ranks
  igraph.options(vertex.size=3, edge.arrow.size=0.1, vertex.label = V(x))
  V(x) $label <- sub("Actor ", "", V(x) $name)
  V(x) $size <- 4 * sqrt(graph.strength(x, mode="in"))
  V(x)[level == "1"]$color = "blue"
  V(x)[level == "2"] $color = "yellow"
  V(x)[level=="3"] $color = "yellow"
  V(x)[level == "4"] $color = "green"
  V(x)[level == "5"] $color = "red"
  plot(x, layout=layout.kamada.kawai)
  title(readline("Title?"))
  #Save x as R object to use in global environment
  save(x,file = "working_matrix")
}
```

## Appendix D

### Interaction simulation model - code

## nullmodel.R

Fri Apr 15 13:10:05 2016

### Null Model:

```
ntrials <- 1000
time <- c()#a vector of time steps which does not reset
universalinformed <- c()#a vector of the number of informed actors which
does not reset
max <- c()
for (i in 1:ntrials){
  crew <- rep("n",39)#establish a group of naive actors
  matrix <- read.csv(file="bottomheavy_simmatrix.csv")#use matrix to look
up social connections
  matrix<- as.matrix(matrix)#convert to matrix
  origin <- sample(23:39,1)#choose junior actor at random
  crew[origin]<-"i"#change state of origin to informed
  informed <- which(crew=="i")#create a vector of informed actors as a
measurement
  tick <- c()#time measurement records each step
  informedcount <- c()#an updating vector of informed persons
  slcoef <- c(0.17,0.83)# social learning coefficient based on mean
prestige
  slcoef2 <- c(0.1,0.9)#residual tranmission prob for random transmission
  for (steps in 1:25){
    tick <- c(tick,steps)
    for (j in 1:length(informed)){#this module defines connected actors
      neighbours <- c(matrix[,informed[j]])#extract the row from the
matrix for each informed actor
      connected <- which(neighbours==1)#extract connected actors
      outcome <- c(1,0)#success/failure
      for (k in 1:length(connected)){#this module determines successful
attempts to inform neighbours
        transmit <- sample(outcome,1,prob=slcoef)#determine success
        if (transmit ==1){crew[connected[k]]<-"i"} else{#if successful
change state to informed
          transmit2 <- sample(outcome,1,prob=slcoef2)#second chance to
transmit
          nonprescrew <- sample(1:39,1)#no pres bias just sample all crew
          if (transmit2==1){crew[nonprescrew]<-"i"}}#if successful add to
informed
        }
        neighbours <- c()#clear the neighbours vector for next loop
      }
      informed <- which(crew=="i")#update the informed vector
      informedcount <- c(informedcount, length(informed))#number of informed
crew
      time <- c(time, tick)
      universalinformed <- c(universalinformed, informedcount)
      if (length(informed) == 39){
        max <- c(max,tick)
      }
    }
  }
}
```

```

        break}#saturation
    }
}
trialresults <- data.frame(time, universalinformed)

ggplot(trialresults,aes(x=time,y=universalinformed))+geom_point(shape=1,alpha=1/100)+stat_smooth()+xlab("Time steps")+ylab("Informed persons")+ylim(0,40)+ggtitle("Bottom heavy condition")+theme(title=element_text(size=20),axis.text=element_text(size=20),axis.title=element_text(size=20))

stats <- data.frame(max(time),mean(max),sd(max))

print(stats)

stat.desc(max)

```

## ptbspres.R

Fri Apr 15 13:14:17 2016

### Prestige Model:

```

ntrials <-1000
time <- c()#a vector of time steps which does not reset
universalinformed <- c()#a vector of the number of informed actors which does not reset
max <-c()
for (i in 1:ntrials){
  crew <- rep("n",39)#establish a group of naive actors
  matrix <- read.csv(file="bottomheavy_simmatrix.csv")#use matrix to look up social connections
  matrix<- as.matrix(matrix)#convert to matrix
  origin <- sample(23:39,1)#choose junior actor at random
  crew[origin]<-"i"#change state of origin to informed
  informed <- which(crew=="i")#create a vector of informed actors as a measurement
  tick <-0#time measurement records each step
  informedcount <- 0#a measure of informed persons
  slcoef <- c(0.1,0.9)# social Learning coefficient
  for (steps in 1:25){
    if (length(informed) > 39){break}#saturation
    tick <- tick+1
    for (j in 1:length(informed)){#this module defines connected actors
      neighbours <- c(matrix[,informed[j]])#extract the row from the matrix for each informed actor
      connected <-which(neighbours==1)#extract connected actors
      prestige <- length(connected)/39#simple indegree (normalised) calc
      prob <-c(prestige, 1-prestige)#establish probabilities and outcomes
      outcome <-c(0,1)#success/failure
      for (k in 1:length(connected)){#this module determines successful attempts to inform neighbours
        transmit <- sample(outcome,1,replace=TRUE,prob=prob)#determine success

```



```

    transmit2 <- sample(outcome,1,prob=slcoef)
    nonprescrew <- sample(1:39,1)#no pres bias just sample all crew
    if (transmit ==1){crew[connected[k]]<-"i"}else{
      if (transmit2==1){crew[nonprescrew]<-"i"}}#if successful add to
informed
    }
    neighbours <-c()#clear the neighbours vector for next loop
  }
  informed <- which(crew=="i")#update the informed vector
  informedcount <-length(informed)#number of informed crew
  time <- c(time, tick)
  universalinformed <- c(universalinformed, informedcount)
  if (length(informed) == 39){
    max <- c(max,tick)
    break}#saturation
  }
}

trialresults <- data.frame(time,universalinformed)

ggplot(trialresults,aes(x=time,y=universalinformed))+geom_point(shape=1,alpha=1/10)+stat_smooth(method = "gam", formula = y~ x)+xlab("Time
steps")+ylab("Informed persons")+ylim(0,40)+ggtitle("Bottom heavy
condition")+theme(title=element_text(size=20),axis.text=element_text(size=
20),axis.title=element_text(size=20))

stats <- data.frame(max(max),mean(max),sd(max))

print(stats)

stat.desc(max)

```

## Appendix E

# Ethical Approval



## MOD Research Ethics Committee (General)

**Corporate Secretariat  
Bldg 5, G01-614  
Dstl Porton Down  
Salisbury, Wiltshire  
SP4 0JQ**

Secretary: Marie Jones  
telephone: 01980 658155  
e-mail: mnjones@dstl.gov.uk  
fax: 01980 613004

---

Lieutenant Commander Matt Offord MBA RN  
Room 212  
Maritime Operations Centre  
Command Building  
HMNB Clyde  
Faslane  
Argyll & Bute  
G84 8DF

Ref: 1206/418

10<sup>th</sup> March 2012

---

Dear Lieutenant Commander Offord,

**Re: Leadership interaction and sea command in the Royal Navy – version 0.4**

Thank you for submitting this interesting protocol for ethical review and making minor amendments.

I am happy to give ethical approval for this research on behalf of the MOD Research Ethics Committee (General) and should be grateful if you would send me a copy of your final report on completion of the study. Please would you also send me a brief interim report in one year's time if the study is still ongoing.

This approval is conditional upon adherence to the protocol – please let me know if any amendment becomes necessary.

Yours sincerely,

Dr Robert Linton  
Chairman MOD Research Ethics Committee (General)

telephone: 020 8877 9329  
e-mail: robert@foxlinton.org  
mobile: 07764616756

# Appendix F

## Impact

# Impact of the research on the Royal Navy

## 0.1 Introduction

My research has had impact in three areas within the RN. Firstly an article I wrote in 2015 concerning the effect of playing sport on group cohesion was enthusiastically received. Beyond this I published an article concerning the role of prestige in general on team cohesion and the results of my SNA research were also used at Flag Officer Sea Training. I was also asked to use SNA to assess team cohesion at Britannia Royal Naval College (BRNC) Dartmouth where young officers are trained. Finally I was accepted into the First Sea Lord's Fellowship (an internal think tank) and contributed to a Navy wide study of leadership and retention of personnel. This study used both my academically published work and my internal papers.

The three areas are described below and evidence in the form of e-mails, papers and event programmes are also included in this appendix.

## 0.2 Case 1: Sports and team cohesion

In 2015 I wrote an internal paper (included here) on the effect of team sports played by work groups. This paper was based on the findings of Project 2. However, instead of reporting all the dimensions of prestige, I focussed on groups and the degree to which they played sport together. Project 2 demonstrated that inclusive groups in this regard had a higher probability of performing better on Operational Sea Training. I knew this would of great interest to the naval community as a whole and I submitted it to be published in "Senior Officers' Messages" on the RN Intranet. RN Head of Studies approved the paper and it was published in July 2015.

The paper generated a great deal of interest. I was invited to brief senior officers such as Commodore Wallicker, Commander Faslane Flotilla on the effect of sports on team cohesion. I gave a presentation on the subject at the Defence Leadership Network Event at Shrivenham Leadership Centre in the Defence Academy in July 2015. This presentation was given to senior officers from all three services. I also gave the same presentation to the First Sea Lord's Fellowship in London in December 2015. Both presentations were well received. Finally, the paper was used in support of the RN policy physical development and therefore was used in devising RN policy, a fact that Captain Mike Young RN, Captain RN Physical Development has attested to, he has also cited my

work in his policy statement. This statement, emails relating to the study and programmes for the two events mentioned are included in this appendix.

### **0.3 Case 2: Prestige and SNA**

As a result of another internal paper on prestige, my research was once again used by a number of senior officers. The paper was based on the findings of Projects 2 and 3 and the computer simulations in Chapter 7. This led to another presentation at the Defence Academy, this time to the Intermediate Command and Staff Course. I was also asked to conduct an SNA analysis of the groups of trainee officers at BRNC Dartmouth. I have included the thank you letters for these events.

### **0.4 Case 3: Navy Board Growth Team**

Following the success of my internal papers I was invited to apply for the First Sea Lord's Fellowship and once admitted, I was recruited for a team studying the impact of RN leadership on the retention of naval personnel. This research was presented to the Navy Board (the highest board in the RN) on the 19th May 2016 at the Lord's Cricket Ground. We were tasked to discover what changes would be necessary to RN leadership to ensure the RN could retain its people during the first period of growth in the RN since WWII. Our overall finding was that leadership needed to be more people focussed and move away from leader-centric views of leadership. My work on engagement Offord et al. (2016) was cited on numerous occasions as was the work from Case 1 (above). I have included a number of emails concerning this study which had impact at the highest level, including an email from Admiral Key, the Fleet Commander. Many of these emails are addressed to Major Winch, a collaborator on the Growth Team. The work of the Growth Team led to a change in the definition of merit used for assessing personnel for promotion to include an appreciation for leaders' followers.



# PHYSICAL DEVELOPMENT IN THE ROYAL NAVY

Strategy and Plan 2016-2020



**NAVY** **fit**

# Introduction

This document sets out the strategy and high level plan for Naval Service (NS) Physical Development (PDev), between 2016 and 2020. It is a guiding framework that<sup>1</sup> will direct the efforts of those individuals responsible for setting PDev policy and delivering PDev effect. It flows directly from, and delivers to, CNPERS Management Plan.

As such **this document articulates the goal of our collective endeavour and is the benchmark against which our achievements will be measured.** To ensure success therefore, all subordinate activity must be clearly developed from this superior intent. Similarly to maximise job satisfaction and generate a feeling of contribution, it is imperative that everyone's daily activity can be seen to clearly support this strategy and plan.

It is really important to have this clear 'line of sight' from strategic intent through to local activity as it allows us all to have, both individual and collective, awareness of how our priorities and contributions support the delivery of our PDev agenda.

## Context

The 2015 Strategic Defence and Security Review has 'reset' the Naval Service with a strong investment in equipment and a small uplift in manpower. However during the 2016-2020 period, despite being nominally in 'Manning Balance'<sup>2</sup>, the NS is not at 'Full Manning' and there are significant deficits within Specialisations and rank/rate. This creates additional pressure on our people and threatens both retention and the moral component of operational capability (MCoFOC).

Fortunately PDev can help mitigate some of the effects of this manning challenge. The results of the Armed Forces Continuous Attitude Survey clearly show that the opportunity to pursue fitness and AT enhances an individual's sense of wellbeing and improves morale. This has a strong positive impact on general satisfaction with Service life and increases the likelihood that an individual will remain in the Service. **Better still recent research<sup>3</sup> shows leaders who do PDev are better than those who don't.**

Results from our first annual PDev Trends Survey (2015) tell us that whilst 65% of NS personnel are doing PDev three or more times a week, and that 82% are either satisfied or very satisfied with the service we provide, unfortunately 58% indicated that they are forced to participate outside of normal working hours in what they consider to be their 'own time' (a further 14% participate during lunch time) due to lack of time and support from management.

Put simply: ***We have demonstrated PDev enhances performance, morale and retention so is vital to the delivery of the Future Navy – but much work still remains to be done.***

This strategy and plan explains 'why' 'what' and 'how' we intend to achieve during the 2016-2020 period.

---

<sup>1</sup> Along with the Personal, Families, Community Support & Physical Development (PFCS&PD) Management Plan containing the specific Standing and Change Objectives for Physical Education (PEd), Adventurous Training (AT) and Sport,

<sup>2</sup> Circa 30,000 Regular Trained Strength against a Liability of circa 30,000

<sup>3</sup> Offord, M. (2015) The Effect of Team Sports on Team Cohesion, Leadership and Performance in the RN



## Our Vision

**Resilient and resourceful Naval Service personnel, ready for operations and committed to each other and the Service.**

## Our Mission

**To provide and support accessible Physical Development opportunities** that strengthen and enhance the resilience and resourcefulness of NS personnel and their commitment to each other and the Service.

## Our 5 Top ‘Delivery’ Objectives

1. To increase **participation** in PDev by providing **accessible** and **attractive** facilities and opportunities across all aspects of Sport, AT and Challenging Activities (CA).
2. To facilitate NS compliance with 2SL’s Personal Functional Standards (PFS) for PDev by **embedding a culture where personnel instinctively include PDev within the working day.**
3. To **promote a healthy lifestyle** across the NS by delivering the PDev aspects of the Navy Command Health and Wellbeing Plan.
4. To create a sports governance and delivery regime that ensures **access, participation and excellence from grassroots to elite level across all 39 Sports Associations.**
5. To facilitate NS compliance with 2SL’s Personal Functional Standards (PFS) for AT through **direct support to the Front Line, and unit directed mass participation, AT.**

## Our vital 6<sup>th</sup> Objective

6. **Measure and communicate the outcomes and benefits of PDev delivery** in order to increase support and demonstrate delivery of the Navy Command Health and Wellbeing Plan and 2SL’s Personal Functional Standards (PFS) for PEd, AT and Sport.

## Your part in the plan

***All of the emboldened aspirations and objectives above are as relevant and applicable at unit level as they are to the Service as a whole – every one can deliver to them!***

## Our Core Outputs

Achieving the PDev Mission and Objectives requires PFCS&PD to deliver the following outputs on an enduring basis:

1. A **PT cadre** (including ATI and ERI sub cadres) with the SQEP to deliver the PDev Mission and a resourceful Continued Professional Development (CPD) programme to inform future practice and maintain currency;
2. **NS policy** for PEd, Sport and AT;
3. **RN policy** for RNFT (CMS 2);
4. Strategic **leadership of the PT Specialisation** (and inherent ATI/ERI cadres) enacted via Head of Specialisation role;
5. **Delivery of AT** at RN and tri-Service levels through;
  - a. **Support to front line units;**
  - b. Level 2 AT at the **Naval Outdoor Centre (Germany);**
  - c. Sponsorship of **Joint Services Adventurous Sail Training;**
  - d. Sponsorship for **Joint Services Sub Aqua Diving;**
  - e. **Delivery of RN ATI training;**
6. Grassroots **“sport for all”** campaign;
7. Leadership for delivery of sport via the conduit of the 39 Naval Service **Sports Associations;**
8. Generation of **non-public funds for sport and AT;**
9. Lead User for the **AT and Sport Boats capability;**
10. **Assurance for the safe delivery** of PEd and AT;
11. Leadership of the PDev aspects of the **Navy Command Health and Wellbeing Plan;**
12. Provision of **HMS TEMERAIRE**, which sits in the CNPERS Chain of Command, together with the Burnaby Road facilities, providing the Centre of Excellence for NS sport.
13. **Communication** of the requirement for, benefit of, and support available to PDev.

## Intent for the delivery of Core Outputs 2016-2020

**Produce and sustain a PT cadre** - The NCR and ZBR confirmed the requirement to support the PT specialisation. Over the last 5 years the cadre has suffered from under manning and the intention over the course of this plan is to grow the specialisation back to manning balance by achieving maximum GTS from LPTQC per annum. The Exercise Rehabilitation Instructor (ERI) and the Adventurous Training Instructor (ATI) sub specialisations will be grown so that ERI and ATI personnel will generally complete two assignments within their sub specialisation before completing a general PT assignment. This will maintain the breadth of their employability.

**NS policy for PEd, Sport and AT** - The RN policy requirements for PDev is captured in 2SL's PFS, BR 3 Part 5 Chapter 29 and BR 51(RN Physical Training Manual). In the next 5 years the objective is to increase participation in PDev, Sport and AT through the provision of accessible and attractive facilities and a broad menu of opportunity that allows personnel a wide choice of engagement in the PDev agenda. The development of PDev policy will be focused on increasing participation levels whilst ensuring that safety standards are

maintained, the development of fitness programmes that properly consider the needs of pre and post maternity females and establishing the Defence Occupational Fitness Programme that is designed to encourage a lifestyle change in those who are diagnosed as being obese or repeatedly fail to achieve their RNFT pass standard.

**RN policy for RNFT** – At the moment personnel under the age of 55 are required to be in date for RNFT unless they hold a medical exemption. The developing use of the OBIEE JPA tool will allow better transparency of those who are Out Of Date (OOD) for RNFT. As many of this group hold leadership positions, either as Officers or Senior Rates, holding them to account will have a positive impact on their juniors. Over the course of this plan the target is to drive the figure for OOD personnel down by 50% to below 4% of eligible personnel. The development of a science based RNFT point for post maternity females, coupled to active PDev engagement with this group, is designed to remove the apprehension of returning to the gym environment, give greater creditability to the PDev regime for maternity females and drive up first time RNFT pass rates.

**Leadership of the PT Specialisation** – Capt PFCS&PD is the Head of the PT Specialisation and is supported by the Commanding Officer HMS TEMERAIRE in conjunction with the Specialisation Advisor (OR9 PT). They set the head mark for the PT specialisation through the execution of the PT Specialisation Manning Strategy in support of this overarching PDev Strategy.

**Coherence and mutual support between RN and RM PT** - The two Naval Service PT cadres support the development of very different target populations however they do share some common expertise. Whilst respecting the differences it will be important to explore where the two can be more joined up – for the benefit of all.

**Delivery of Adventurous Training** - Adventurous Training (AT) provides the means to develop personal and inter-personal leadership skills within a controlled risk environment. It is recognised by all three Services that AT contributes to operational capability by enhancing the physical and mental robustness of Service personnel. Increasingly it is recognised that AT also contributes to recruiting, operational stress management, personal development and retention, all of which serve to ensure an enduring military covenant for Service personnel throughout the career. The key target over this period is to increase AT participation across the Naval Service from 20% to 25% pa, amending 2SL's PFS accordingly, as a mandated target. This equates to a rise from 6600 wks/yr to 8000wks/yr. Efforts will concentrate on improving access to Level 2 'mass participation' activities which are aimed at novice participants and can be either voluntary or directed by unit commanders. The key elements to the delivery of AT are:

**Deliver AT to Front Line Units** – The key thrust of RN AT is now focussed on the highly successful delivery of AT/CA to operational units in situ, often during OSPs.

**Delivery of level 2 AT at the Naval Outdoor Centre Germany** - The key aim over the period of this plan is to increase the capacity of NOCG by 25% from 52 to 65 places per week with a roll-out to full capacity by FY 18/19.

**Joint Services Adventurous Sail Training** - The Joint Services Adventurous Sail Training Centre (JSASTC) at Gosport operates a fleet of 20 yachts capable of delivering all RYA practical training courses and Level 3 expeditions worldwide.

The main challenge in the early part of this plan will be the incorporation of the fleet of yachts currently owned by the British Kiel Yacht Club in Germany.

**Joint Services Sub Aqua Diving** - The Joint Service Sub Aqua Diving Centre (JSSADC) at HMNB Plymouth delivers sub aqua diving training from entry level to Advanced Instructor and Supervisor using the training systems and programmes of the British Sub Aqua Club. The challenge is to continue to deliver sub aqua diving to an expanding customer base as the existing overseas sub aqua training Centres close. Additionally, the Centre must also re-locate to more permanent premises as the Devonport South Yard is returned to Plymouth City Council.

**ATI Training** – Following the closure of the Joint Service School of ATI training, the sS now deliver specialist AT training 'in-house'. The first ATI course delivered by the NSATT from HMS Temeraire commenced Jun 15 and will complete in Feb 16. Utilising resources such as NOCG and existing JS expertise at the JS Mountain Training Centre (Anglesey), the aim is to improve the overall standard of training and target it towards the specific needs of Naval Service personnel.

**Delivery of Grassroots Sports Menu of Opportunities** – The objective is to continue to provide a broad menu of opportunity to all NS personnel with a particular emphasis on fun, grassroots activities that are readily accessible and attractive. Recognising the specific needs of female Service personnel, a dedicated Sports Development Officer will lead on the provision of a targeted grassroots development strategy. In accordance with 2SL's PFS, support of senior management and the command chain will be sought to maximise the opportunities that NS personnel have to participate in sport and physical activity during the working day. Capt PFCS and PD will continue to provide the lead for delivery of sport via the conduit of the 39 Naval Service Sports Associations.

**Generation of non-public funds for sport and AT** - The sport and AT pillars of the PDev agenda are supported with non-public funding from the Naval Service Sports Charity, the RN Sports Lottery, commercial sponsorship and personal contributions:

**Naval Service Sports Charity (NSSC)** – makes annual grants of £440k to support Sports Association running costs, regional sport, coaching costs and grants to elite and 2nd tier sportsmen/women. Supported by RNRMC Sports Lottery money the NSSC employs an accommodation manager who oversees the 96 bed facility in HMS Temeraire, 3 Sports Development Officers responsible for Sailing, Golf, Winter Sports, Netball, Swimming and female focused sport and a full-time Director of Operations. The main effort for the NSSC from 2015-2020 is to continue to champion the case for Sport within the RNRMC Group of Charities, to support the Naval Service Sports Board (NSSB) and Capt PFCS&PD and his Sports staff in the provision of sport and sports facilities

**RN Sports Lottery** – is strategically vital for the PDev agenda, providing £1.25m pa for sports tours, training camps, grassroots, equipment, AT, CA and capital projects. During the 2016-2020 period the objective is to grow income by £25k pa.

**Commercial Sponsorship** – Sports Associations are encouraged to secure sponsorship in order to supplement their income and those sports that are attractive to sponsors are generally successful. However, sponsorship is unpredictable and an unstable platform for a financial plan and therefore, whilst encouragement will continue, it does not feature as a reliable enabler to the PDev agenda.

**Financial Lead for the AT and Sport Boats capability** – Captain PFCS&PD, as chairman of the AT and Sports Management Board, is responsible for the annual maintenance budget for all AT and sport craft. Project Adventure, has been set up to develop a long term solution for both maintenance and procurement for this fleet and the key task is putting in place structures and assurance processes utilising the expertise from both within our own staff and existing bodies such as the Boat's IPT. From 2017/18, a new funding line from 2SL should ensure long term viability but in the short term, Project Adventure will concentrate on the future of sport sailing (dinghies) and associated safety craft with an aspiration to take them out of the publically funded process and put them under the auspices of the RN Sailing Association.

**Assurance of the safe delivery of AT and PEd** -. Recommendations made to improve the oversight and management of AT have already resulted in the creation of a single OF4 responsible for both AT policy and delivery. Clarity has been given to the ODH responsibilities for AT activity under a variety of circumstances and perhaps most importantly, it has highlighted to all Commanding Officers their responsibility to ensure that any AT conducted by members of their unit is done so with appropriate authorisation and assurance. HMS Temeraire's AT team will focus on assuring all PT departments and those commercial providers used regularly in the UK. In a similar vein assurance of the PEd agenda will be provided through a rolling inspection process led by SO2 Regional PDev and a team of SMEs drawn from the staff of HMS TEMERAIRE.

**Delivery of the Navy Command Health and Wellbeing Plan** – The lead for delivery of the Naval Health and Wellbeing Plan (NHWP) rests with Captain PFCS and PD through CO TEM. This annual plan outlines the health and wellbeing objectives, targets and timelines for the NS with the purpose of meeting the targets set in the Defence Peoples' Health and Wellbeing Plan (DPHWP). The NHWP includes five objectives that are based around each life-stage of Naval personnel and are summarised as: Join Well, Train Well, Work Well, Live Well, Leave Well; these objectives provide a base for the NHWP Strategic Targets. The initial focus for the NS will be initiating a healthy lifestyle culture change within the NS. Initially focused on educating new recruits and ensuring a healthy lifestyle education during training this should, over time, lead to the NS as a whole having a healthier culture and ultimately increase deployability.

**HMS TEMERAIRE**. - HMS TEMERAIRE, which sits in the CNPERS Chain of Command and ACNS(Pers) area of delivery, is a Centre of Excellence for NS sport and is home to the RNSPT and Captain PFCS&PD PDev HQ staff. These combined units provide and ensure that a joined up business approach is adopted in the PDev arena. Together with the Burnaby Road Fleet sports facilities, TEMERAIRE is also home to the Centre of Excellence for NS sport providing high grade facilities for the coaching development of NS representational sports personnel and development of elite level coaches plus dedicated sports accommodation and a swimming pool. Over the period of this plan the key aims will be the

collocation of a significant proportion of the PFCS focused staff from West Battery to HMS TEMERAIRE and the upgrade of Information Systems.

## **PDev Communications**

A number of channels of communication are being developed to assist culture change and inform the NS on PDev issues. These include:

- NAVYfit campaign – Launching in January 16 and led by RN Media and Comms, the customer face of PDev will be rebranded as NAVYfit. This brand will be incorporated into the PDev Portal, printed publications and NS communications.
- PDev Trends Survey – results of the PDev Trends survey will be published annually to raise awareness of PDev issues and compliance with 2SL's Personal Functional Standards for sport and AT.
- PDev (NAVYfit) Portal – A comprehensive website providing a one-stop-shop for contact details, results, news and images for each RN Sports Association.  
[www.royalnavy.mod.uk/sports](http://www.royalnavy.mod.uk/sports)
- Sports Fixtures Calendar – An interactive calendar providing details RN sports fixtures, including those authorised for travel at public expense.  
[www.royalnavy.mod.uk/sports/calendar](http://www.royalnavy.mod.uk/sports/calendar)
- Social Media – Royal Navy Sport Facebook page providing results, images and details of future sports events. The page is linked to the parent Royal Navy Facebook page and is support by RN Media and Comms.
- Sports and Recreation Facilities – A comprehensive list of PDev facilities issues and concerns has been compiled and is being maintained to provide Command with an accurate account of the condition the PDev Estate.
- The regional quarterly return process have been streamlined and simplified to facilitate accurate capture of PDev expenditure, info relating to PDev output across the regions, as well as providing a platform to highlight issues, concerns and achievements.
- Fit To Fight magazine – This annual publication acts as a shop window, serving to encourage and promote participation in AT/CA's, sports and activities through the collation of articles and pictures submitted by Service personnel.

## **Final Thought**

**Question:** There are three frogs sitting on a log, one decides to jump off – how many are left?

**Answer:** Three (deciding to do something and actually doing it are not the same thing!)

**Point:** This document constitutes intent and direction – it will only become a reality though our collective efforts.



First Sea Lord  
Fellowship

## The First Sea Lord Fellowship Annual Review 2015

7 December 2015 in HMS President<sup>1</sup>

0930 *Tea/coffee available in The Wardroom*

Move to Classroom 1/49

Conference chaired by Captain Rob Wood - Senior Hudson Fellow 2015/16

1000 *Welcome Remarks: Exploiting the 1SL Fellowship in the Post-SDSR Period*  
Rear Admiral Nick Hine - Assistant Chief of Naval Staff (Policy)

### Presentations by 1SL Fellows

1030 *Jakobsen's Ideal Policy of Coercive Diplomacy as a Strategy to Prevent Nuclear Proliferation*  
Lieutenant Commander Rob Baillie - Royal Marines' Corps Tutor

1100 *Strategic Imagination - How to find Blue Sky in the Eye of a Storm*  
Lieutenant Colonel Aran Jess - Hudson Fellow, University of Oxford

1130 *The Effect of Team Sports on Performance in Operational Sea Training*  
Lieutenant Commander Matt Offord - Squadron Executive Officer (FOST MPV)

1200 *Characterizing Cyberspace to aid the Development of Strategy*  
Commander Adrian Venables - RNR Communications and Information Systems Officer

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1230 *Buffet Lunch available in The Wardroom*

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1330 *Assessing Maritime Power in the Asia-Pacific: The Impact of American Strategic Re-Balance*  
The Corbett Centre for Maritime Policy Studies

Professor Greg Kennedy, Professor Harsh Pant and Dr Tim Benbow

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1500 *Tea/coffee available in The Wardroom*

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<sup>1</sup> By kind permission of the Commanding Officer, Commander John Herriman

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### Operationalizing the 1SL Fellowship

Two short presentations followed by an open discussion

1530 *1SL Fellowship Secretary Update*

Commander Steve McLaughlin – Head of Strategic Studies and 1SL Fellowship Secretary

1550 *The Future Navy Campaign Plan – Cutting the Gordian Knot*

Commander Tim Hulme – Staff Officer to Navy Command HQ Chief of Staff

Conference finishes at 1730

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### Evening Reception hosted by Admiral Sir George Zambellas – First Sea Lord and Chief of the Naval Staff

The Wardroom, HMS President

### With support from the London University Royal Naval Unit

1800 *Evening guests arrive*

1830 *Keynote Address by the First Sea Lord*

*On completion - Presentation of the Mappin & Webb Award 2015*

2030 *Event officially closes*

The Wardroom bar will be open for those that wish to continue networking

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# The Effect of Team Sports on Team Cohesion, Leadership and Performance

Lt Cdr Matt Offord MBA RN

June 8, 2015

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Figure 1: Team sports improve team performance.

## 1 Executive Summary

Recent research into leadership and teamwork in RN Warships conducting Operational Sea Training (OST) has shown that teams who habitually play team sports together are more likely to perform well in OST serials. A total of 8 Mine Countermeasures Vessels (MCMV) participated in 345 assessed serials. It was found that teams who regularly played team sports increased their chances of obtaining a Very Satisfactory (VSAT) assessment or higher.

## 2 Introduction

It has been long supposed that playing sports enhances leadership and teamwork. Yet there has been little empirical evidence to back up this notion. For many the teamwork benefits of participating in sport are so obvious there is no need to conduct an empirical investigation. Take a look around the gym in any naval establishment and you cannot help but notice the teamwork posters featuring naval personnel engaging in sports, AT or extreme pursuits; the link is clear and subconscious. However, some are sceptical. There has been no empirical investigation of these supposed links between performance on a sports pitch and operational team performance on warships and submarines. Recent research into leadership at sea, however, suggests a modest but significant correlation between the two.

As a part of ongoing research into leadership and Sea Command, 13 Senior and 34 Junior Rates (from 8 MCMVs) were interviewed to discover what *they* thought drove good leadership. Among other things, participating in team sports and AT came up again and again. According to these sailors, officers and senior rates who were prepared to take off their rank slides for an hour to play five-a-side were often good leaders. Following this lead the research moved to MCMVs conducting OST at Faslane. Over 12 months, 8 MCMVs were monitored as they conducted sea

training. Team performance was compared with the sporting ties between team members using advanced statistical methods (logistic regression and social network analysis).

### 3 Methodology

The investigation comprised two projects. These are a part of ongoing doctoral research into leadership and Sea Command. The personnel involved were of an average age of 32 and mostly male, a fair representation of the current gender mix and age range at sea. The review of naval leadership began by looking at the Command Leadership and Management (CLM) framework constructed by Captain Dr. Mike Young RN and Professor Victor Dulewicz<sup>1</sup>. These researchers discovered that leadership was based on four main competencies: Align, Create Success, Conceptualise and Interact. Out of these competencies the way a leader interacted with his or her team were deemed the most significantly related to overall performance. The research began by exploring interaction by simply asking some sailors about it.

Project 1, then, was a series of Focus Groups with 8 groups from MCMVs based in Faslane. The technique employs "Grounded Theory" which attempts to discover the truth without having any theories in mind to start with. The interviews with the groups (of 3-8 members) were recorded and the transcripts analysed for themes. There is no statistical treatment of the data, the aim is to discover something new rather than prove old theories. Throughout the Focus Groups sports and AT came up again and again. The participants felt strongly that there were certain opportunities for leaders to be informal and muck in with the lads. Sport was one of the best opportunities to do this:

**Senior Rate 1:** " I think erm...slightly going back to the interaction side of things. Sport is a good level playing field. You kinda erm....if you've got the Captain playing on your football team you don't shout across the field, 'Sir!' it's 'Give me the ball, mate.' It's a level playing field and I see that as positive"

**Senior Rate 2:** " Then if you see them getting stuck in like you're getting stuck in and everyone's trying to achieve the same goal and then its everybody on the level playing field isn't it?"

(Focus Group 6 Transcript)

Sports participation has been informally linked with team performance and leadership since Socrates established the Gymnasium School to develop society's leaders. But the link has rarely, if ever, been satisfactorily proven. The RN strongly encourages sports participation not only to improve teamwork, but also to maintain fitness standards and for morale. Demonstrating this link would validate at least one of the benefits of RN investment in sports and AT.

In order to empirically investigate the link between sports participation and team performance a logistic regression was conducted for 345 OST serials comparing team performance with sports

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<sup>1</sup>A study into leadership and management competencies predicting superior performance in the British Royal Navy (2009)

participation. In order to obtain information about sports participation a questionnaire was circulated to the whole Ship's Company. The questionnaire required participants to list the personnel with whom they played sport. For all 8 vessels 100 percent feedback was obtained. This allowed the Ship's Company to be mapped by their sports ties; who played sport with whom. From this a measurement of every participant's sports prestige was obtained. The term simply means how many people an individual played sport with. Other types of prestige were also measured, sport participation is only one way to achieve team cohesion. However, this report will only consider the sports angle. An example of the mapping of sporting ties is at Figure 2 (below), this kind of visual description is called a sociogram. Note that the individuals have been anonymised.

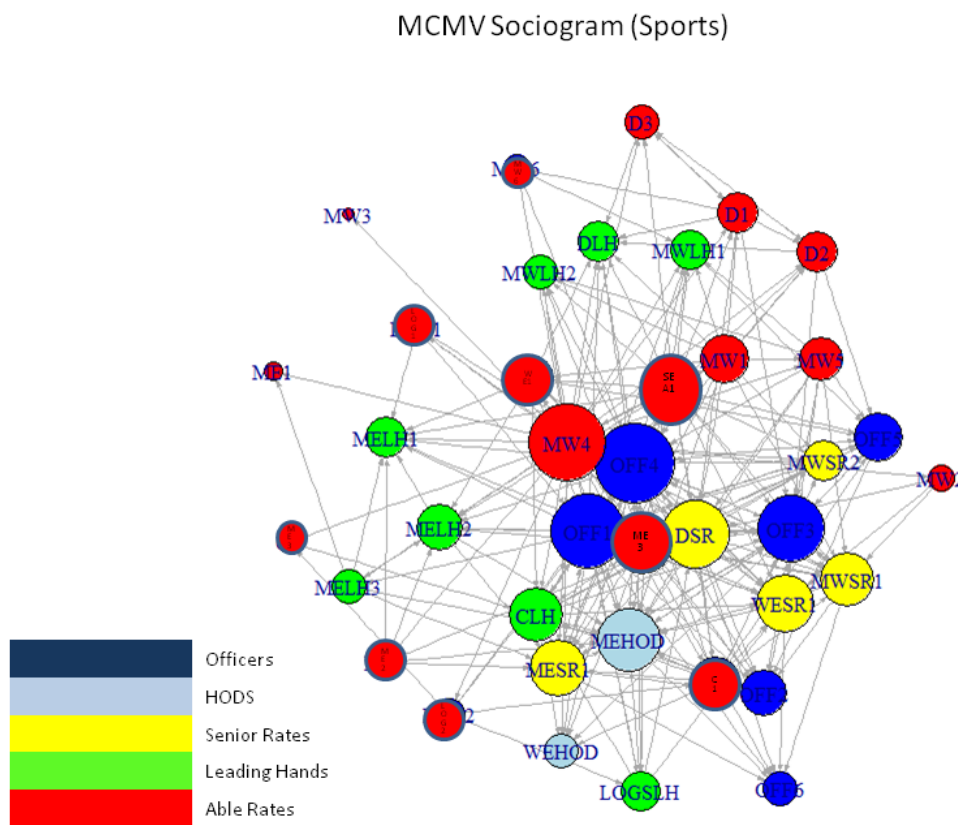


Figure 2: MCMV Sociogram

*The sociogram shows the participants in the survey as circles (called nodes). The size of the circle increases with higher numbers of ties which are shown as lines connecting the nodes.*

Team performance is relatively straightforward to measure since FOST sea-riders conduct serials, assess them and write comprehensive reports with the assessment scores. The OST Guide strictly defines what assessments are given in what circumstances. Therefore the performance

measurements were considered accurate. A statistical test of reliability showed the assessments were over 90 per cent reliable, which is extremely good for this type of research. Assessments are given as follows:

1. Unsatisfactory
2. Below Standard
3. Satisfactory
4. Very Satisfactory
5. Good
6. Very Good

The majority of serials were assessed as satisfactory (SAT), although VSAT assessments are fairly common. Over the 345 serials around a third of serials were assessed as VSAT or higher, giving a probability of a high score at around 30 percent. Instead of using this fairly complex set of outcomes the results were categorised as High for assessments which were Very Satisfactory (VSAT) or higher and Low otherwise. This simplifies the procedure so that a statistical analysis could discover if there was any correlation between the team leaders' sports prestige and the teams' assessments.

## **4 Ethics**

The study has been cleared by the MOD Research Ethics Committee (MODREC). All participants have been assured anonymity. This was achieved by replacing their name with an anonymous code or designation after the analysis. Although names were required in the analysis to track the conversation or social ties, they were anonymised after the event.

## **5 Results**

The analysis gave an odds ratio of achieving a High assessment as 2.85. This means that a team leader who plays team sports with every member of his or her team is, on average, 2.85 times more likely to achieve a VSAT than one who does not play sports with any of his team at all. This result is also statistically significant. This initial result is not very informative unless the base probability of achieving a high score is known. However an analysis of the probabilities shows that for a group without the advantage of high cohesion, the probability of high performance is about 30 percent. For extremely sporty teams however this can increase to about 50 percent. In other words the chance of success increases to evens. This is shown in the graph at Figure 3:

# Team Players and Leaders

Team performance and team sports

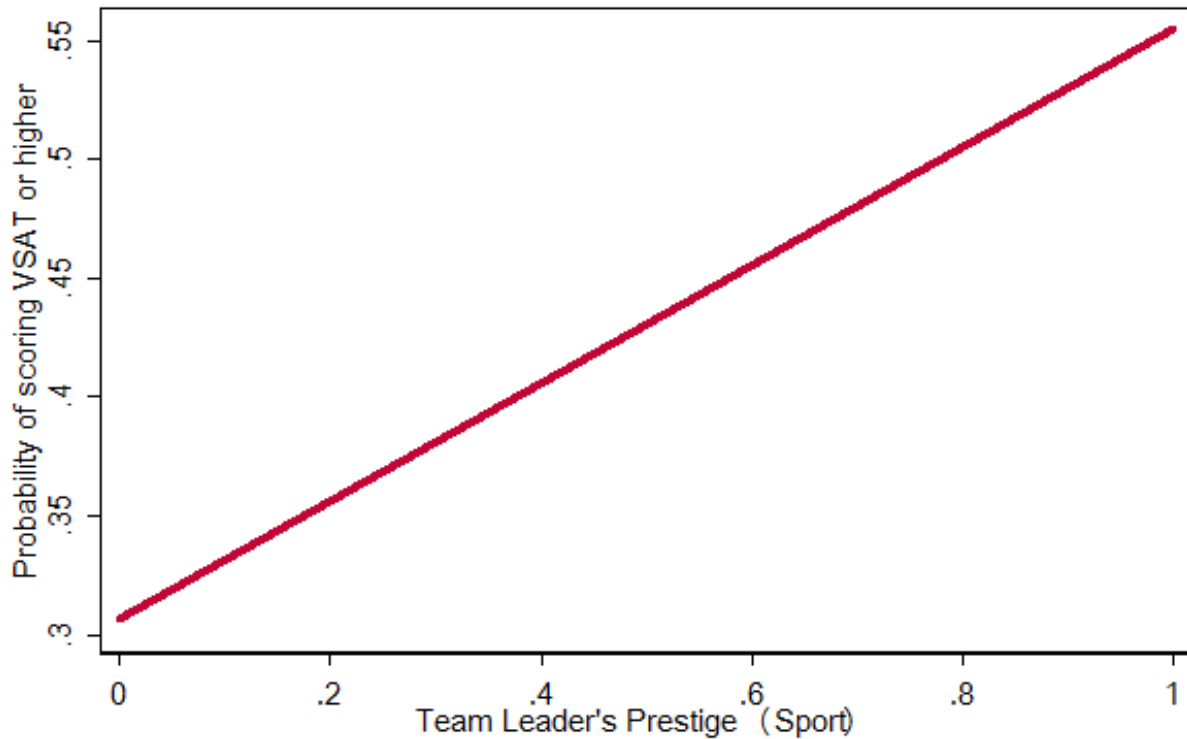


Figure 3: The effect of sport participation on team performance

*The probability of a high score starts at about 30 percent. As the leader's sports prestige increases on the x axis towards 1 (100 percent participation) so the probability increases to 55 percent (on the y axis)*

## 6 Summary

This research is the first known attempt to quantify the effect of playing sports together on team cohesion and performance in the RN. The results demonstrate conclusively that playing sports for Ship's Companies and departments has a positive and beneficial effect on team performance. Specifically if team leaders (section heads, HODS and Command Teams) play sports with their teams there is a small but significant positive effect on group coordination and therefore performance. The reasons for this are not specifically covered by this research and may be of interest to researchers in the future. Speculatively, it is assumed that the levelling effect indicated in the Focus Groups could be one reason for improving team performance. By allowing themselves to interact on an equal footing with subordinates leaders are able to build up trust. Another factor maybe the opportunity to practice group coordination when playing sports, i.e. a team learn about each

other's strengths, weaknesses and personalities through sports. For example, through repeated football matches the team learn who is assertive, who is pensive and so on. These traits are directly transferable to situations in the workplace.

The effect of playing sports together are, admittedly, modest. However given that the main aim of playing sport in the RN is to improve morale and add to general fitness, this side-effect is of notable importance. The effect on team cohesion and leadership is just one part of the many benefits of PDev.

## **7 Recommendations**

It is recommended that the results of this study are disseminated as widely as possible and that unit COs review their current arrangements for team sports as well as PDev generally. Project 1 indicated that the types of activity need not be confined to traditional sports (e.g. five-a-side football), but can include AT or simple hill walks (as was the case for one group). The demographics of the participants (mostly males in their twenties to thirties) meant that high energy and impact sports were preferred but COs should be mindful that such activities may not appeal to all. AT was mentioned a great deal in Project 1 and AT can include problem solving which is directly transferrable to problems in the workplace (e.g. navigation, coping with environmental issues). These types of activities probably hold more benefit than more simple sports. Unit COs should therefore assure themselves that there are adequate opportunities to conduct regular team-building activities such as sports and AT.

## DEFENCE LEADERSHIP NETWORK (DLN) EVENT

27 & 28 JULY 2015 @ BECKETT HOUSE, SHRIVENHAM

Timings	Event	Venue	Lead	Notes
<b>Monday 27 July 2015</b>				<b>Day 1</b>
A/R	Delegates Arrive	Main Gate / Beckett House Reception	All	Visiting delegates should arrive via the Main Gate for issue of car pass. MOD ID Card / Photo ID required.
1230 - 1330	Lunch	Dining Room	All	Pay As You Dine (PAYD).
1330 - 1400	Refreshments, Welcome & Introductions	Nelson Room	Brig Ian Huntley RM	
1400 - 1415	DLN Overview & Programme	Nelson Room	Cdr Karl Santrian RN	Update on current situation with the DLN & Programme brief.
1415 - 1430	CDLM / 3 Pillars Update	Nelson Room	Brig Ian Huntley RM	Update on the work strand to reform the DefAc and the changes that are envisaged with regard to CDLM.
1430 - 1500	CDLM Brief	Nelson Room	Karen Gallagher-Barton / Angela Clifford / Dr Alison Wilken	What have <i>the Roman's</i> CDLM ever done for us?' More importantly, what is being, and can be, delivered by CDLM?
1500 - 1530	Networking & Refreshments	Mess Ante Room	All	
1530 - 1600	Army Leadership Overview & Update	Nelson Room	Lt Col David Crome / Prof Lloyd Clark	Including Army Leadership Institute Scoping Study
1600 - 1700	Defence Leadership Challenges Workshop	Nelson Room	Cdr Karl Santrian RN	Workshop to identify leadership challenges across the Defence community, raise awareness and discuss.
1700 - A/R	Single Service Meetings	tbc	A/R	Opportunity for the individual Services to meet and discuss their leadership development business.
1845 - 1900	Pre-Dinner Drinks	John Adair Bar	All	Jacket & Tie / female equivalent ( <i>excludes Royal Marines</i> )
1900 - 2000	Networking Dinner	Dining Room	All	Cost of food covered by CDLM. Drinks at own cost.
2000 - 2100	Sport and Team Cohesion	Nelson Room	Lt Cdr Matt Offord RN	A presentation on a recent study paper into sport and team cohesion. Followed by questions / discussion.
2100 - 2300	Informal Social and Networking	John Adair Bar	All	



## DEFENCE LEADERSHIP NETWORK (DLN) EVENT

27 & 28 JULY 2015 @ BECKETT HOUSE, SHRIVENHAM

Timings	Event	Venue	Lead	Notes
<b>Tuesday 28 July 2015</b>				<b>Day 2</b>
0730 - 0810	Breakfast	Dining Room	All	Pay As You Dine (PAYD).
0810 - 0830	Networking & Refreshments	Mess Ante Room	All	
0830 - 0835	Welcome Back	Nelson Room	Brig Ian Huntley RM	
0835 - 0900	Requirement for a Leadership development Instructors Course	Nelson Room	Brig Ian Huntley RM	Would it be useful for Defence to have a common leadership development Instructors course? (with accreditation?)
0900 - 0930	RAF Leadership Overview & Update	Nelson Room	Gp Capt John Jupp	
0930 - 1000	Sponsored Leadership Degrees – Future Direction	Nelson Room	Brig Ian Huntley RM	Discussion to ascertain the aim of MOD sponsored leadership degrees and to explore options for the future.
1000 - 1030	MOD Civil Service Leadership Overview & Update	Nelson Room	Joanne Shepard	
1030 - 1050	Networking & Refreshments	Mess Ante Room	All	
1050 - 1100	DA Masterclass Update	Nelson Room	Samantha Fryer	Overview of the DA Masterclass Programme.
1100 - 1130	RN/RM Leadership Overview & Update	Nelson Room	Capt Mike Young RN	Including Royal Marines Input up to ICSC(L).
1130 - 1200	Thinking Skills Brief	Nelson Room	Prof Karen Carr	What's the latest with 'Thinking Skills' and how the initiative is moving forward in Defence?
1200 - 1215	ACSC Leadership Overview & Update	Nelson Room	Cdr David Salisbury RN	
1215 - 1230	Leadership In Defence Publication	Nelson	Dr Alison Wilken	Brief and discussion around the Leadership in Defence publication.
1230 - 1315	Lunch	Dining Room	All	Pay As You Dine (PAYD).
1315 - 1400	DLN Review and the Future Direction	Nelson Room	Cdr Karl Santrian RN	Opportunity to provide 'hot' feedback and to scope and endorse the future direction for the DLN.
1400 - 1430	Any Other Business and Close	Nelson Room	Brig Ian Huntley RM	



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<a href="#">Key Messages</a>	<a href="#">Chief Of Naval Staff/1SL</a>	<a href="#">Reading List</a>	<a href="#">Reading List Archive</a>	<a href="#">1SL Fellowship</a>
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**Note That Some Of The Documents In This List Are OFFICIAL-SENSITIVE, Users Must Ensure They Remain Appropriately Protected**

**2015**

**September - Articles of Interest**

[NS Monthly Digest of Strategic Naval Interest](#)

[Khurans 2015 - Sea-basing rather than 'String of Pearls'](#)

[Newson 2015 - Future Conflict Implications](#)

[Pallai 2015 - Bear Dragon and Eagle Strategies](#)

[RNZN Strategic Plan 2015 - 20](#)

**July - Articles of Interest**

[NS Articles of Strategic Naval Interest Jul 15](#)

[Benbow 2015 - Waterloo and It's Strategic Context](#)

[Offord 2015 - The Effect of Team Sports on Team Cohesion](#)

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Lieutenant Commander M Offord Royal Navy  
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25 January 2016

*Dear Lieutenant Commander Offord.*

On behalf of the Directing Staff of the Royal Naval Division and the Intermediate Command and Staff Course (Maritime) 1/16, I would like to take this opportunity to thank you for the superb presentation you delivered on the 21 January 2016. I personally found your take on theoretical leadership fascinating and it was refreshing to see a leadership model that was directly shaped from the situation onboard operational HM Ships.

I believe you have been invited to talk again to future Intermediate Command and Staff Courses (Maritime) and I am sure they will find your presentation equally interesting and relevant. Linda Mahoney, from the Royal Naval Division, will contact you with these future dates.

I would like to thank you again for travelling all the way from Scotland to deliver your informative presentation.

Yours Aye

Steven Andrews  
Lieutenant Royal Navy  
Intermediate Command and Staff Course (Maritime) Student

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Matt,

I have been given your email address by Michael Towl with reference to a discussion about further enhancing the way the Royal Naval Division (RND) at JSCSC, Shrivenham delivers it's Command Leadership Management and Ethos (CLME) package.

In recent months we have tried to produce a more joined up and better communicated CLME package to the students on ICSC(M). We produced a 'golden thread' throughout the cse which builds logically from an Intro to CLME to testing the students. We have run the package once but are aware further refinement is required. In sum the 'golden thread' has 5 phases:

- Ph 1: Defining CLME
- Ph 2: Theory of CLME
- Ph 3: Practical Application of CLME
- Ph 4: Reflection on CLME
- Ph 5: Assessing the understanding of CLME

*\*A description of each phase is on Page 2 of the attached document.*

I am aware you have produced a PhD looking at 'leadership/ team/ social dynamic studies conducted on Naval vessels' and this may prove to be very useful when delivering Ph 3. It may also prove to be a good bridge between the theory of leadership and its practical application (Ph 2 & 3).

I am still in consultation with the Director of the RND and the Defence Leadership Centre at Shrivenham on how we best deliver CLME but I would be very interested to hear your views on whether you think your work could add value. Once again the attached document should provide you with a greater insight into what we are trying to achieve.

Many thanks in advance.

*Rgds*

*Sam*

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# Prestige Power Prevents Poor Performance

Lt Cdr Matt Offord MBA RN

April 22, 2016

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# Prestige Power Prevents Poor Performance



## Executive Summary

Traditional leadership studies focus exclusively on leaders with little or no consideration of the role of followers. The RN also works hard at individual leadership training but tends to focus on teamwork only when it goes wrong. My 6 year doctoral research project into leadership-interaction reveals that naval teams assess their leaders by assigning prestige to credible leaders. Leaders' prestige levels determine the amount of engagement they can expect from followers and team performance. I also discovered, through the use of computer simulations, that individual prestige scores have large a large effect on a team's ability to disseminate C2 information whilst on Operational Sea Training (OST). Furthermore for a team to be most effective, prestige must be distributed at all levels and not just focussed on prominent leaders. My research suggests that leadership in effective Ships' Companies is distributed and not invested solely in formal leaders such as Commanding Officers, Killicks of the Mess and so on. In this article I will describe my findings on the power of prestige, use computer simulation to describe prestige effects at the unit level and make recommendations for collective training and leadership development.

## Introduction

In the 1940's a prominent leadership scholar, Ralph Stogdill, conducted a ground breaking review of leadership literature (Stogdill, 1948). He could find little empirical support for the diverse lists of leadership traits which had been thought to be relevant to leadership outcomes such as team performance. This caused many researchers to look at situations rather than leaders themselves for answers. Another development following the decline of trait approaches was the rise of competencies as a means of describing leaders. This approach can be seen in the RN in the Command Leadership and Management (CLM) framework of competencies: Create Success, Align, Interact and Conceptualise (Young and Dulewicz, 2005, 2006, 2008, 2009). Of these competencies, the ability to interact had the highest correlation with team performance (Young and Dulewicz, 2009).

Having conducted three projects into the role of interaction and whether leaders' traits in RN teams could explain team performance on their own. In fact, the ability of a leader to interact does have a demonstrable affect on team performance but, as I demonstrate in these simulations, formal and informal leaders distributed through a team create the most efficient teamwork.

## Why?

I conducted research into leadership beginning with the *interact* competence. I began by interviewing 47 Junior and Senior Rates about interaction with leaders. A rich description of interaction dynamics resulting from these interviews is described in Offord et al. (2016). I focus in this article on a process of assessing leaders' credibility or prestige. The interviewees stated that prestige is key to getting engagement from naval teams. Prestige can be based on professional credibility, personal approachability or participation in sports or social activities. The first two types of prestige allow followers to ascertain which leaders are likely sources of advice and influence. Participation in sports or social events appear to allow team bonding on a "level playing field" and may include other events such as joining in with scrubbing out or store ship.

Following this line of enquiry, I measured the prestige levels of the leaders in MCMVs on OST and compared these with the performance of each team and sub-team in OST serials. Measuring prestige was accomplished by asking each member of the Ship's Company whom they would go to for advice or who they play sport with. Prestige was based on the number of "votes" each person receives. Team leader prestige was compared with OST serials assessments. Because OST serials are assessed strictly using the guidance from the OST Guide, I knew the assessments were reliable. However to be sure, I carried out a comparison of all the 345 serial reports used with the OST Guide. The reliability of sea riders' assessments was over 90 %. The statistical testing of the data (a logistic regression) showed a significant relationship between team leader prestige and team performance. The relationship is shown graphically at Figure 1.

The graph shows that each of the four types of prestige has an effect on team performance. The greatest effect size is leaders who combine all of the types of prestige. However, advice networks (professional credibility and personal approachability) demonstrate the greatest effect on team performance. The MCMVs under study were at the beginning of their Force Generation cycle with



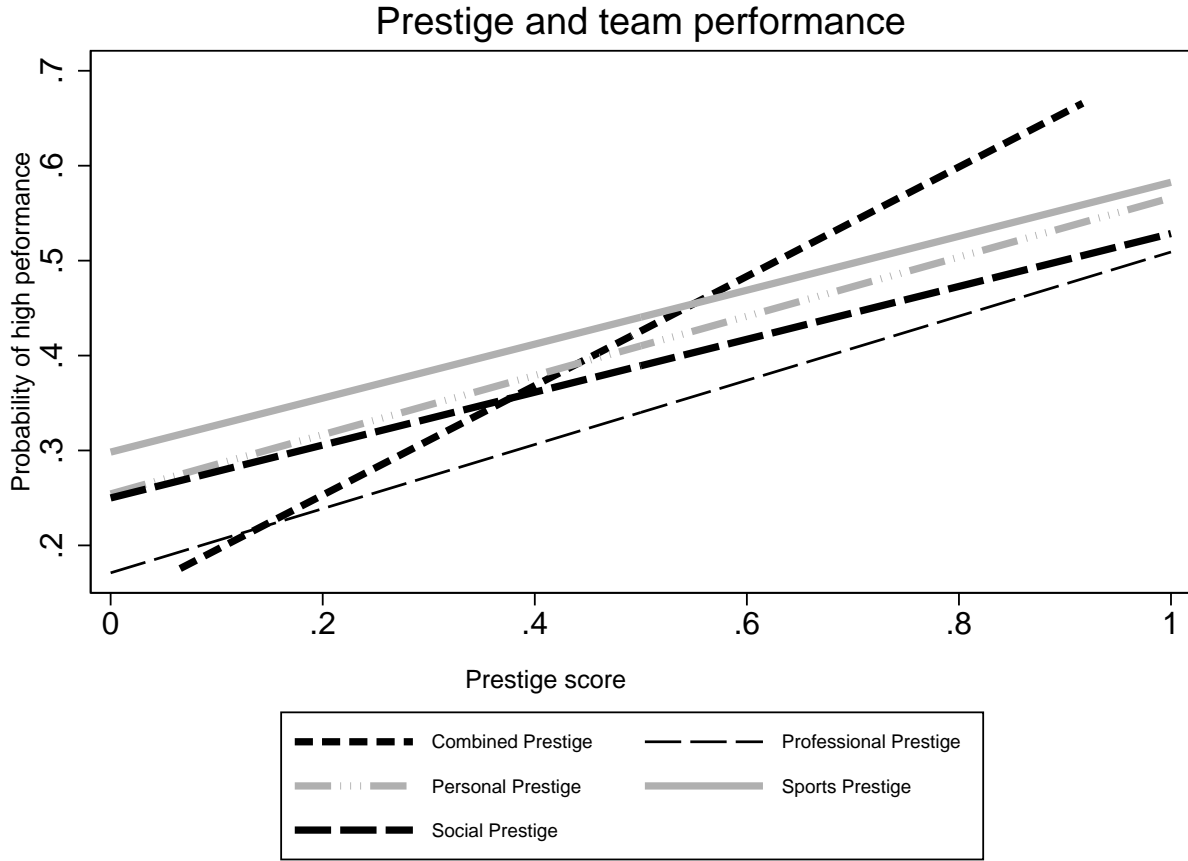


Figure 1: Prestige variables and probability of high performance.

recently formed teams. This meant there had been little, or no time, to bond or to allow team cohesion to cause the prestige scores measured. In other words it was followers' assessment of prestige which caused the effect on team performance and not the other way around.

Because of the prominence of advice networks in the earlier project, I moved on to study the effects of professional and personal prestige on team performance. Prestigious persons are thought by some scholars to be channels for information transmission. This has a direct bearing on C2 system in the RN. Since warships are cybernetic systems (using both human and technological components), information transmission through the human network is of vital importance in processing C2 information. I wanted to see if prestigious individuals were more likely to be "listened to" and their information passed without corruption to the Command. To do this I observed C2 information being passed from person to person in HMS Clyde, whilst involved in major OST serials such as a DCX 1.1 or ADEX. The results of this project are shown at Figure 2.

It seems that information transmission has an even greater relationship with prestige compared with overall team assessments. However, participation networks (sport and social networks) had no effect on information transmission. This means that all types of prestige support team performance

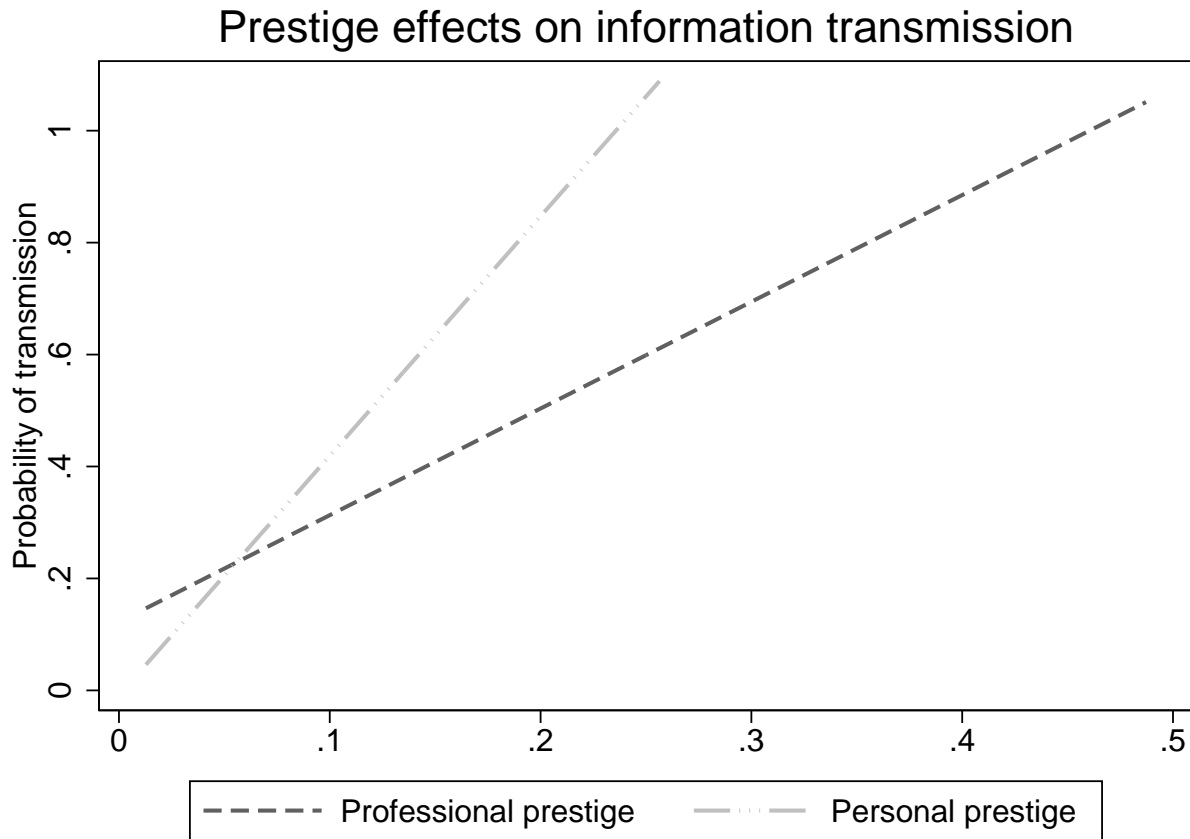


Figure 2: Probability of the successful transmission of information based on prestige

but advice networks appear to have a strong effect on information transmission which is of critical importance in C2.

To take the analysis further, I wanted to discover how individual prestige would affect the group as a whole and whether, as is often considered, only leaders need to accumulate prestige. To accomplish this I used computer simulation, an ideal method to demonstrate the emergence of effects on different levels of analysis.

## How?

I used computer simulation to analyse how prestige can affect information transmission using the rules I discovered in the earlier three projects, especially the last project. Simulation was used to illustrate my findings and also to apply those findings at a group level. Simulation is simply a family of techniques for modelling, a method used informally everywhere and formally in science to understand complexity. Most social researchers including leadership scholars are used to using statistical models. Simulation performs the same function as a statistical model but the simula-

tion replaces the process of parameter estimation resulting in simulated data not predicted data. Computer simulations may be used to explain social processes, or for prediction, as well as for the discovery and formalisation of new knowledge. Despite its numerous applications, simulations are designed following a similar process: definition of the target, observations from the target upon which to base the model, assumptions used to design the model, the execution of the simulation, verification or “debugging”, validation and sensitivity analysis. The target is the name used to describe the real-world situation under study.

I used the R programme to conduct the simulations for a number of reasons: it is freely available; it is compatible with a very wide number of platforms; it has a wide number of additional packages and, perhaps most importantly, it is supported by a wide community of experts actively developing and teaching R. For this and other reasons, R is rapidly becoming the default language for many disciplines. I also used R in Projects 2 and 3.

Multi-agent simulations use a frame-work of rules called a *production system*. Projects 2 and 3 indicated the value of prestige in supporting leadership interaction and team performance. Prestige could therefore be used in a rule-based production system to calculate the probability of reliable transmission of social information. In fact, the agent can, loosely speaking, decide how to respond to its situation.

An informed actor was programmed to attempt to pass this information to connected neighbours as defined by relational ties. Actors who received information became informed. If the seed actor was unsuccessful, that node attempted to pass the information to a random member of the Ship’s Company at a low rate of transmission defined as a social learning coefficient. This feature represents the probability of passing information regardless of prestige biases. The social learning coefficient was set at 0.1 to allow a low probability of passing information without social ties. The realism of this assumption is unimportant as long as all models and conditions maintain a consistent social learning coefficient to allow comparison.

In this project I created networks based on the examples I had studied in MCMVs and OPVs. Each member of the virtual Ship’s Company was naive (possessing no information) at the beginning of the simulation but could become informed at some stage. I refer to Ship’s Company members as actors for the purposes of this analysis. Each actor also possessed a neighbourhood of connected actors, simulating individuals who would go to the actor for advice. Each assessment of the vector of informed actors, their neighbourhoods and the success of their attempts to pass on information was conducted in a single time step. At the beginning of each step, the state of the crew (informed or naive) was updated. Time was measured by the number of steps. Although the time periods have no relation to the time it takes to pass on information in the real world, different prestige conditions could be compared with each other using the number of time steps it took to achieve the maximum number of informed actors. The number of steps was set at 50 as it was observed that all of the networks achieved equilibrium within this time. The simulation was repeated 1000 times before mean saturation times (in steps) were measured. The simulation design is demonstrated using Universal Modelling Language (UML) at Figure 3.

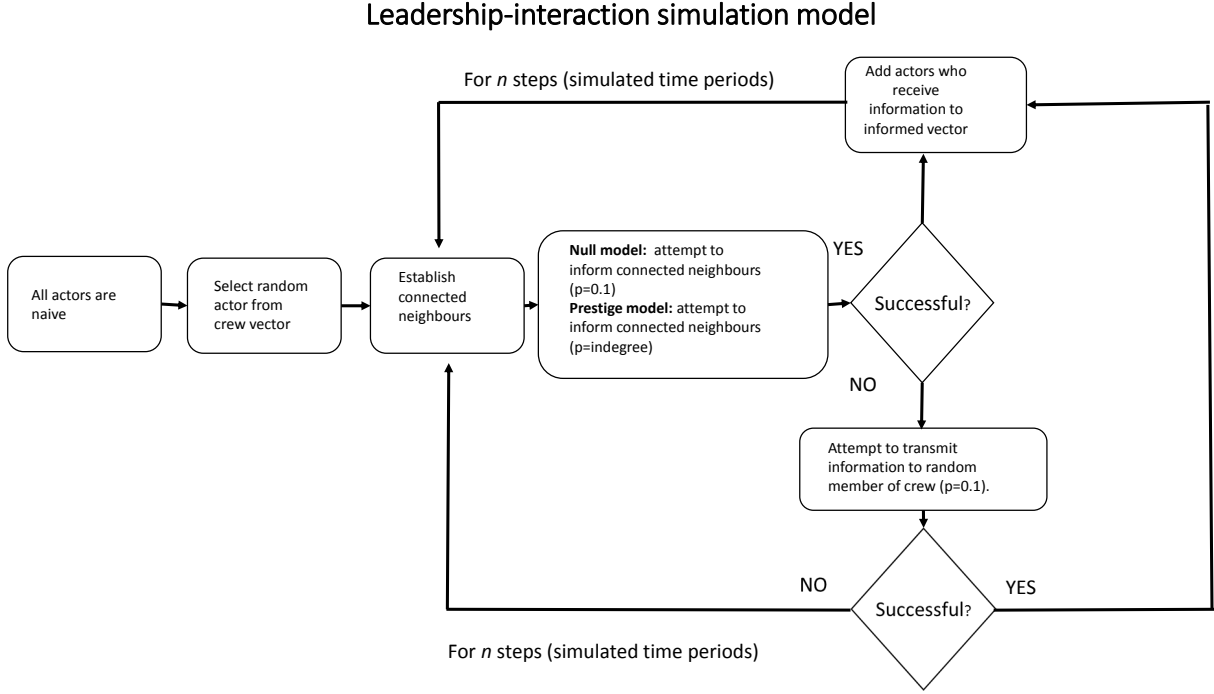


Figure 3: The leadership-interaction simulation model UML diagram.

### Simulation models and conditions

Two models were designed: null model and prestige model. The null model was designed such that the distribution of prestige (the absence or presence of prestigious actors) would have no effect on the simulation. This was achieved by allowing information to pass from actor to actor at set probability. The prestige model, however, allowed information to be passed as defined by actors' prestige (as discovered in Project 3). In both models the average prestige through the network was the same so that both models could be easily compared. Both models also incorporated a feature that allowed actors a "second chance" to pass data to a random actor if their attempt to pass information to a neighbour was unsuccessful. This again reflects reality where information is not passed solely on prestige assessments.

Each model was run in four conditions. For all conditions networks were used with a density of 0.17. That is, the percentage of relational ties between actors. As density affects the overall transmission opportunities within the network, it was important to keep it constant in all simulations. The average density of the 10 professional networks from Projects 2 and 3 dictated was also 0.17, so real world features were retained in the models.

Simulation conditions were achieved by manipulating the prestige distribution in the four networks used for each model. The first network featured random ties throughout. A real world model was created by copying a network from Project 2 which happened to feature the average value for density. Finally two networks were created with abnormal levels of prestige among either high or low ranking nodes. These were called "top heavy" or "bottom heavy" accordingly. The models and

conditions are shown below:

1. Random prestige model - Randomised ties through the network
2. Real world model - Real world network with same density ( $d = 0.17$ ) as the other models
3. Top heavy model - Network reflecting high prestige among leaders (actors 1 - 16)
4. Bottom heavy model - Network reflecting high prestige among followers (actors 23 - 39)

The networks at Figure 4 show the four conditions diagrammatically. The colour codes show how different ranks reflect prestige in the different conditions. The random distribution condition shows that higher prestige vertices (shown by larger circles) are represented by all ranks. The “top heavy” and “bottom heavy” conditions show large blue or red vertices respectively. The real world condition demonstrates some features of the “top heavy” network in that the prestigious actors are officers or senior rates. Additionally this network has greater isolation of the red lower ranking nodes than any of the other networks.

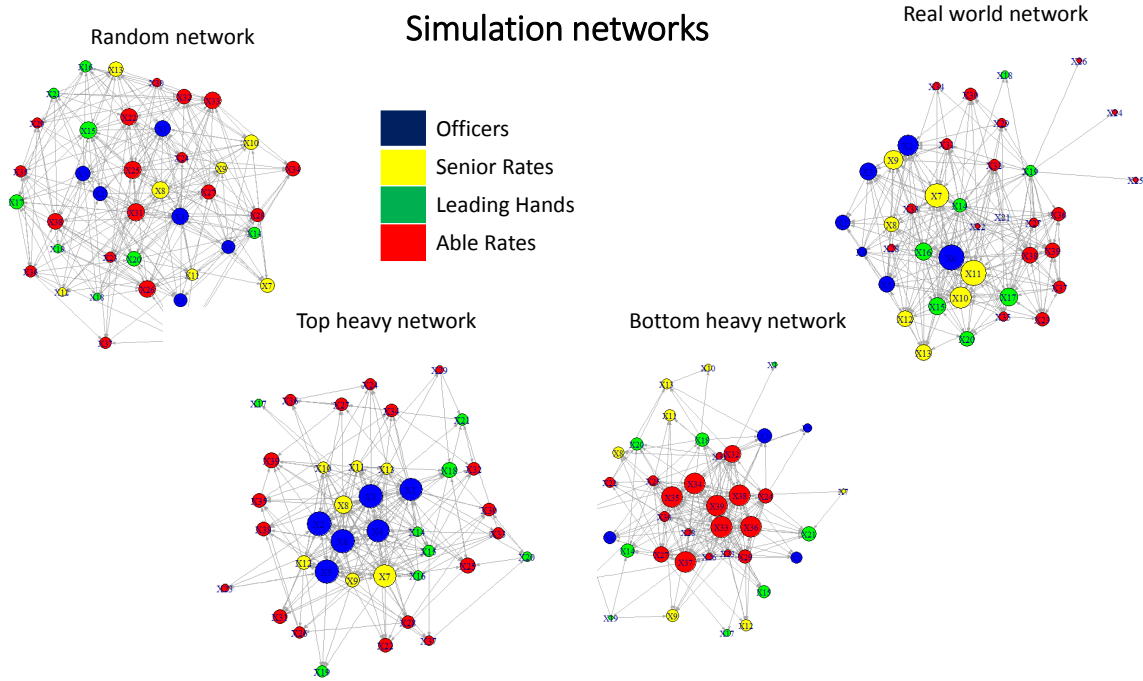


Figure 4: Simulation conditions.

The simulation was designed to record the number of informed and naive actors at each time step. These values are averaged over 1000 simulations giving a mean number of informed actors at each time step. This also allows the mean time of “saturation” to be noted. It was this statistic which was used to gauge the efficiency of each network.

## Results of the computer simulation

The null models, as expected, featured longer time periods to achieve saturation than the prestige models. The mean times to achieve saturation were closer to the prestige models, although appreciable differences were predicted. Null model maximum times significantly exceeded the prestige models (see Table 1). For all models the real world network took the longest time to achieve saturation and also had the greatest variability over 1000 simulations. The randomly distributed network was the most efficient at disseminating information whilst the “top heavy” and “bottom heavy” networks performed equally. The results of these simulations are given at Figure 5

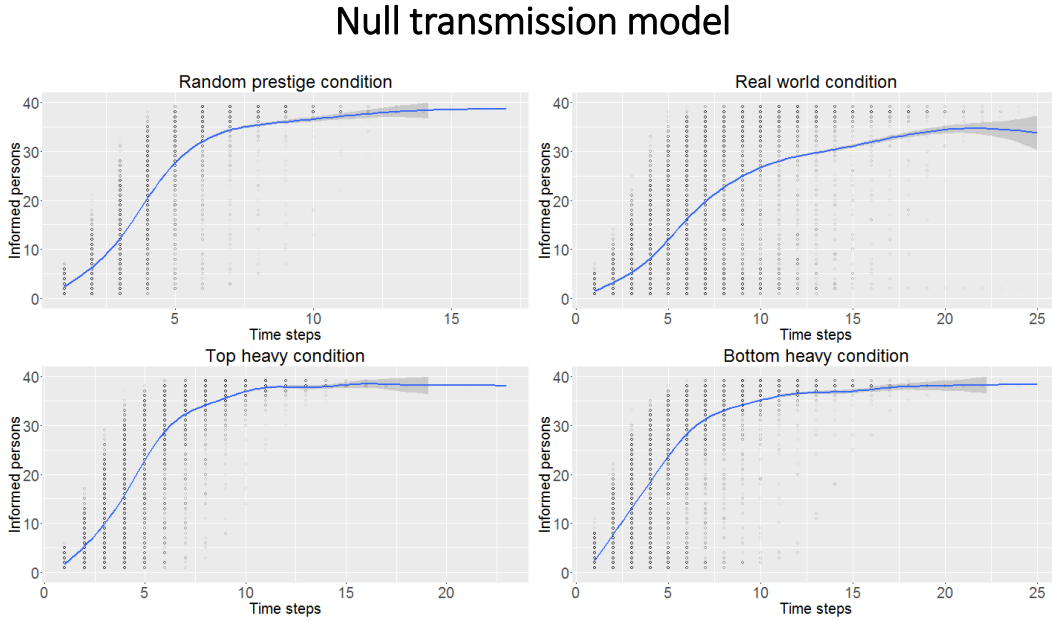


Figure 5: Information dissemination in the null model (social learning coefficient).

*This model has a uniform probability of transmission from an actor to connected neighbours and then unconnected neighbours. The grey shaded area represents the 95% CI*

Since the models differ only in the individual effects of prestige, relatively prestigious actors account for increases in network efficiency. The mean prestige value used in the null model is low (which explains its lower efficiency) but the mean prestige is equal in both models. The variation of prestige in individual actors clearly allows those actors to act as efficient channels for information transmission. The relationship between the conditions is similar in both with the real world condition achieving saturation in the longest time. The biased distributions achieve a similar efficiency to each other. The random distribution condition is significantly more efficient than the other conditions. The results are given at Figure 6. The real world condition shows greater variability as can be seen from the standard deviation column in Table 1. This suggests that although real world

networks can achieve comparable results, they are less reliable than the other conditions modelled. Maximum times in the prestige models were much smaller, such that mean saturation times were closer to maximum times. This means that the prestige-bias modestly affects mean saturation times but drastically reduces the possibility for slow information dissemination. The predictions from all of the simulations are listed in Table 1.

## Prestige-biased transmission model

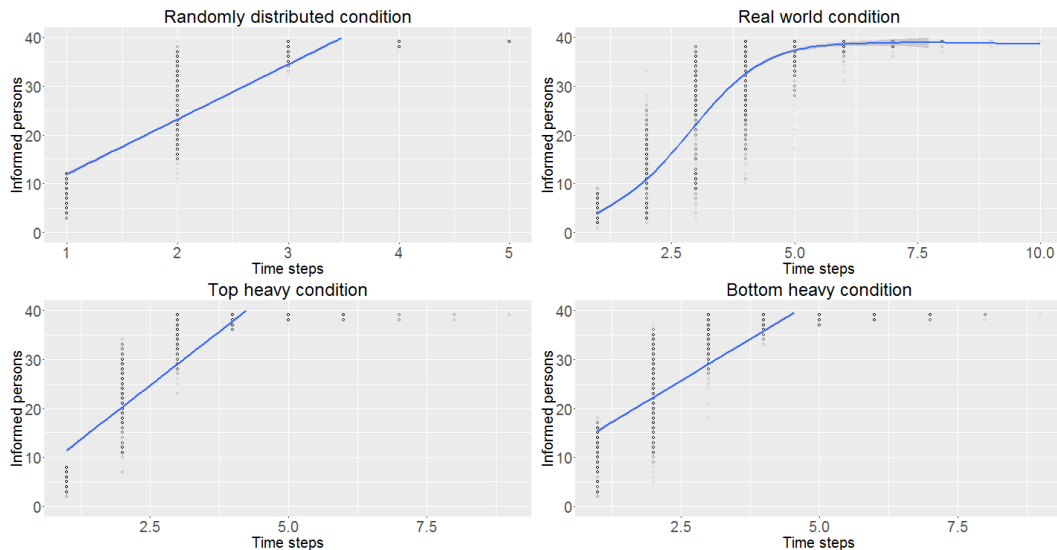


Figure 6: Information dissemination in the prestige model.

*This model incorporates opportunity and probability of successful transmission in prestige production system. The grey shaded area represents the 95% CI*

Real world prestige structure were shown, in Project 2, to be influenced by rank structure. Therefore the real world network echoes formal hierarchies designed to optimise information transmission in C2 scenarios. Yet the simulations show that this structure was less efficient than distorted hierarchies and randomly distributed prestige networks. This may be due to the larger number of isolated nodes at the lower levels. This reflects an observation I made during Project 3, that prestigious actors appeared to hoard information, not sharing it with lower prestige colleagues. Both the “top heavy” and “bottom heavy” networks represented a clique of some description. Both of these structures were less efficient than a network with an equal spread of prestige. This suggests that prestige must work at all levels to allow efficient transmission of information at the group level. Both leader-centric and follower-centric approaches to prestige will be less useful in team cohesion than a whole-team approach. Although prestige at all levels improves information transmission, the prestige model clearly demonstrates the role of a few prestigious actors since these individuals can channel information more reliably. It stands to reason that a null model, featuring high prestige

Model and condition	Maximum time*	Mean time**	SD	95% CI
Null - Random distribution	17	4.61	2.61	$5.79e^{-2}$
Null - Real world distribution	25	7.26	4.46	$8.82e^{-2}$
Null - ‘Top heavy’ distribution	23	5.91	3.45	$6.67e^{-2}$
Null - ‘Bottom heavy’ distribution	25	6.48	3.89	$7.22e^{-2}$
Prestige - Random distribution	5	3.48	0.59	$3.67e^{-2}$
Prestige - Real world distribution	11	5.61	1.04	$6.46e^{-2}$
Prestige - ‘Top heavy’ distribution	9	4.25	0.81	$5.022e^{-2}$
Prestige - ‘Bottom heavy’ distribution	9	4.60	0.96	$5.99e^{-2}$

Table 1: Results prestige-bias transmission simulations.

\* *Maximum time to achieve saturation*, \*\* *Mean time to achieve saturation*

scores throughout, would out-perform this model but is unlikely to reflect reality.

## So what?

Although the RN CLM competence *interact* (now called *people skills*) has been validated by my research, I discovered something else. Interactions within a team lead to group assessments of prestige and it is prestige that creates team engagement. Furthermore, it is not just formal leaders who need prestige or who operate in leadership roles. The simulations clearly demonstrate a need for prestigious people at all levels. Prestigious people do not share as willingly with less prestigious people, leading to information cul-de-sacs and impairing the efficiency of a team, certainly with respect to information.

The RN Way Of Leadership (St George, 2012) is a well respected approach to leadership development as shown by the success of the book, written by Andrew St George, in the wider “management book shelf” market. Few organisations can boast a through-career individual leadership programme of the calibre of the RN Enduring Leadership Programme (ELP). However, my research demonstrates that the RN should complement individual leadership training with improved development and assessment of teamwork. We have Leadership Academies but no Teamwork Academies. We assess leadership qualities but not follower qualities which also develop prestige. Prestige is not tied to a formal position, although rank has a bearing on prestige. Sea Training is the only time teamwork is formally assessed, even though almost every career in the RN is essentially a “team sport”. Even FOST only assess teamwork indirectly. There is no formal teamwork assessment in serial reports. FOST sea-riders are not trained formally to gauge team cohesion or dynamics, they rely on experience to achieve this. Even the Training Management (TM) Branch of the RN Officer corps is largely focussed on individual training. JSP 822 (Individual and Collective Training) has only recently been updated and renamed to incorporate collective training, which is still at the policy and not the implementation stage. Despite this, DSTL have developed and published scientific teamwork assessment methods in the academic and mainstream press (e.g. Brannick et al. (1997)).



To my knowledge this research has not been used by the RN.

Based on the research outlined, I recommend the RN reviews its policy on teamwork assessment and development. Leadership research has shown that team-focussed leadership creates better conditions for engagement than task-focussed leadership (Offord et al., 2016; Kahn, 1990). Although OST provides an excellent basis for developing and, to some extent, assessing teamwork, many of us are familiar with disruption to those teams immediately before and after Sea Training. Many Naval teams are never given the opportunity for team-building or assessment (e.g. Battle Staffs, Shore Establishment organisations). AT has been made widely available but is generally taken up on an individual basis, ignoring the opportunities for team development. In other words, despite the oft-cited slogan “the team works”, this may be a happy accident rather than the result of RN policy. Finally, as well as developing team performance, appreciation of useful team players and RN teams in general is more likely to create conditions for psychological engagement, an important factor in the current battle to retain our people. Warships are, as discussed earlier, cybernetic systems. An improvement in team maintenance, to match that of equipment focus, would ensure we get the most out of our assets.

# Bibliography

- Brannick, M. T., Salas, E., Prince, C. W., et al. (1997). *Team performance assessment and measurement: Theory, methods, and applications*. Psychology Press.
- Kahn, W. A. (1990). Psychological conditions for personal engagement and disengagement at work. *Acad. Manag. J.*, 33(4):692–725.
- Offord, M., Gill, R., and Kendal, J. (2016). Leadership between decks : a synthesis and development of engagement and resistance theories of leadership based on evidence from practice in Royal Navy warships. *Leadersh. Organ. Dev. J.*, 37.
- St George, A. (2012). *Royal Navy Way of Leadership*. London: Preface Publishing.
- Stogdill, R. M. (1948). Personal factors associated with leadership: A survey of the literature. *J. Psychol.*, 25(1):35–71.
- Young, M. and Dulewicz, V. (2005). A model of command, leadership and management competency in the british royal navy. *Leadership & Organization Development Journal*, 26(3):228–241.
- Young, M. and Dulewicz, V. (2006). Leadership styles, change context and leader performance in the royal navy. *Journal of Change Management*, 6(4):383–396.
- Young, M. and Dulewicz, V. (2008). Similarities and differences between leadership and management: High-performance competencies in the british royal navy. *British journal of management*, 19(1):17–32.
- Young, M. and Dulewicz, V. (2009). A study into leadership and management competencies predicting superior performance in the british royal navy. *Journal of Management Development*, 28(9):794–820.



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Lt Cdr Matt Offord RN  
Staff Executive Officer to FOST MPV  
HM Naval Base Clyde  
Faslane,  
Helensburgh,  
G84 0EH

4 July 2016

Dear Matt,

I am writing to formally thank you for excellent research and analysis conducted of our current Marinisation Divisions.

It was good to read that the team dynamics within the Divisions is fairly harmonious and actually our initial concerns proved not to be the case.

Hopefully the analysis provided you with a platform to develop your own work and please feel free to use this for any submissions relevant to you.

If we can work together again I would be very keen for this. Thank you again for your contribution and insightful reports.

Iain Cull  
Commander, Royal Navy  
Commander Training

*Looking fwd to catching up soon! If there is any thing else  
we can do to assist your research please let me know.*



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25 January 2016

*Dear Lieutenant Commander Offord.*

On behalf of the Directing Staff of the Royal Naval Division and the Intermediate Command and Staff Course (Maritime) 1/16, I would like to take this opportunity to thank you for the superb presentation you delivered on the 21 January 2016. I personally found your take on theoretical leadership fascinating and it was refreshing to see a leadership model that was directly shaped from the situation onboard operational HM Ships.

I believe you have been invited to talk again to future Intermediate Command and Staff Courses (Maritime) and I am sure they will find your presentation equally interesting and relevant. Linda Mahoney, from the Royal Naval Division, will contact you with these future dates.

I would like to thank you again for travelling all the way from Scotland to deliver your informative presentation.

Yours Aye

Steven Andrews  
Lieutenant Royal Navy  
Intermediate Command and Staff Course (Maritime) Student

Sirs et al,

PSB a note from Commodore Nick Roberts, Hd NS, to the three tiger-teams who took part in the recent 1SL Fellowship briefings to the Navy Board:

***Thank you and well done on your contributions to the Navy Board discussions the other week: the feedback I have received from those in the room, including 1SL and Fleet Commander has been very positive indeed. This was a critical event for the Fellowship, particularly with the new 1SL in the Chair and your innovative ideas and provocative arguments were therefore particularly welcome. As you will be aware, each of your areas of work will be taken forwards by a 3\* lead and we, in the Naval Staff, will now take stock of how we would want the Fellowship to go forwards, both in terms of emphasis and structure - we will consult with you as our thinking develops.***

***I do appreciate that this has been delivered in addition to your ?day job? and for this I am particularly grateful and we remain very keen to harness the intellectual capital that the brightest officers in our Service can bring to the consideration of some of its difficult issues.***

**Peter Laughton| Commander|** Head of Strategic Studies | Naval Staff London | Ministry of Defence | 05.K.16 MOD Main Building | Whitehall | London SW1A 2HB

Tel: 0207 218 1317 | Email:navypol-nsstratstudies@mod.uk | Mil: 9621 81317 | DII: NAVY POL-NS STRAT STUDIES



Major Winch,

I was very struck by your presentation to us last week on how we might better achieve the retention element of our necessary manpower growth through changing our leadership behaviours. One of my key objectives this year (and agreed with 1SL) is to contribute to manpower recovery across the Fleet by improving career progression and reducing VO.

I would like to explore your work further with you and your fellow syndicate members please. In particular, I want to hear whether your research highlighted areas where either we were unaware of why retention is such a challenge for us (ie our current, and in places voluminous, analysis is still lacking), or where our lived or expected behaviours run contrary to established best and good practice. Your observation on the recent change to Merit in the OJAR/SJAR would be one such example, and one I personally found fascinating as it chimed with my understanding of the work of Jim Collins and others on Level 5 leadership (doubtless you have read 'Good to Great' and other such). I have also been involved in a number of conversations recently about whether our leadership approach really is the right one for the challenges we face, both in terms of the demands of fighting and operating in the modern environment, and also reflecting the motivations and perspectives of the people we are privileged to have in the Service with us today.

As a first step, perhaps you would come and share with me in brief the approach your syndicate took, and those areas you looked into in addressing the set question. I anticipate this may lead into further work, which perhaps we would then discuss with the whole group. I do not know where your fellow syndicate members are based, but if also in Portsmouth and diaries allow, then I would be very happy for them to join in from the outset.

My office will be in touch with some options. Over breakfast or lunch (bring your own I am afraid) may give a more informal setting. I would like to establish the 'next steps' by the next NAVB on 21 Jul, and perhaps also to introduce you into the Fleet Command Board process as well.

Finally – well done for the work of you and your 'fellow Fellows'. It was a very thought provoking and high quality pitch that you made to the NavB.

*Ben K*

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07 Mar 16

NAVB\*

## MAXIMISING THE LIVED EXPERIENCE – THE CHANGE NEEDED TO ENABLE GROWTH IN THE ROYAL NAVY

1. **Occasion:** On 17 Mar 16 the NAVB will receive presentations from 1SL Fellowship Tiger Teams designed to challenge the Board. This note summarises some key points and findings underpinning the presentation on growth. It is hoped by highlighting the references in advance, the presentation can be kept succinct and discussion focused on development of workable solutions rather than explaining the premises.

2. **The compelling need for change:** Despite being in nominal ‘manning balance’ we are currently 4000 short<sup>i</sup> of our need and the situation is getting worse. The associated overstretch, churn and myriad change initiatives is putting a huge strain on those who remain<sup>ii</sup> as well as preventing growth. Management theory<sup>iii</sup> would suggest at this point the Navy should subordinate all activity to manpower recovery until this constraint is removed – and the recent NAVB priorities and de-tuned LTOS are good starting points. However, such changes will be irrelevant unless there is an associated improvement in the day-to-day lived experience of our people. This will require a reset of our leadership culture.

3. **The Leadership needed for Growth:** Academic theory<sup>iv</sup>, business good practice<sup>v</sup> and our own research<sup>vi</sup> all agree that people perform at their best, and are happiest, when they are:

- **Connected** (to others and a purpose they deem worthwhile)
- **Empowered** (in line with their ability, and to realise their full potential)
- **Supported** (to grow personally and professionally)
- **Recognised** (for their contribution)

Moreover analysis of AFCAS<sup>vii</sup> and exit interviews<sup>viii</sup> clearly demonstrates that morale and retention are better when line managers demonstrate this sort of thoughtful, caring, *people-focused* leadership.

4. **Our Prevailing Leadership Paradigm:** Whilst the Navy is very successful at espousing the importance accorded to people and their development<sup>ix</sup> data on the reality of the lived experience<sup>x</sup> does not back this up. This is unsurprising as we still primarily train, reward and promote ‘task-achievement’ over people-focused leadership<sup>xi</sup> and even in the midst of a manpower crisis we are further promoting task achievement<sup>xii</sup> at the expense of developing the people who are vital to our long term growth<sup>xiii</sup>.

5. **The ‘Leadership Reset’ needed for Growth<sup>xiv</sup>:**

Away From:	Toward:
Task-Centred	People-Focused
Controlling	Empowering
One Thinker	Many Thinkers
Authority	Autonomy
Putting In	Bringing Out
Executive	Generative
Leader Development	Team Development
Short-term Wins	Long-term Growth

6. The presentation will propose ideas to support such a leadership reset in order to maximise the lived experience and so enable growth.

**Growth Tiger Team<sup>1</sup>**

<sup>1</sup> Capt Mike Young RN; Lt Col Steve Hart RM; Lt Cdr Matt Offord RN, Maj Joe Winch RM (presenter), Prof Eric Groves.

## References:

<sup>i</sup> CNPERS brief for calls on the Fleet Commander and Naval Secretary dated 18 Jan 16 notes that support to augmentation, over-use of the margin, and non-liability demand is at an all-time high [at 3643 plus further 1000 limited/non-deployable in Nov 15]... despite the fact that overall and usable strength will fall throughout 2016 to at least Apr 17 ... causing massive stretch, a reduction in harmony and experience, and increasing gapping ashore.

<sup>ii</sup> Armed Forces Pay Review Body 2015/16 Pay Round – Naval Service Visit Programme Summary 30 Nov 15.

<sup>iii</sup> Theory of Constraints as detailed in *The Goal* (Goldratt, 1986). The theory of constraints (TOC) is an approach to management that views any manageable system as being limited in achieving more of its goals by a very small number of constraints. There is always at least one constraint, and TOC uses a focusing process to identify the constraint and restructure the rest of the organization around it.

<sup>iv</sup> Enduring themes across 'Humanist Leadership' (of the 1950s and 60s e.g. McGregor, Maslow) 'New School' Leadership (starting in the 1970s e.g. Zalenik, Bennis, Kotter) 'Transformational Leadership' (1980s onwards – e.g. McGregor-Burns, Bass) up to recent 'New Psychology of Leadership' (Haslam, 2010)

<sup>v</sup> Harvard Business Review August 2014 reported: 'In a study of 51,836 leaders, only 27 of them were rated in the bottom quartile in terms of likability and in the top quartile in terms of overall leadership effectiveness—in other words, the chances that a manager who is strongly disliked will be considered a good leader are only about one in 2,000'.

<sup>vi</sup> See: Offord, M (2015) *'The Effect of Team Sports on Team Cohesion, Leadership and Performance'(in the RN)*. Young M (2014) 'Leadership that develops other people'. *Journal of General Management* Vol. 39 No. 3 Spring 2014. Young, M. & Dulewicz, V. (2008). 'The Similarities and Differences in the Competencies of Effective Command Performance, Leadership and Management in the British Royal Navy'. *British Journal of Management* Vol 19, pp. 17-32. Young, M. & Dulewicz, V. (2009). 'A study into leadership and management competencies predicting superior performance in the British Royal Navy, *Journal of Management Development* Vol. 28 No. 9, pp. 794-820.

<sup>vii</sup> PFCS&PD 050914 dated 05 Sep 14. *Improving Wellbeing, Retention and Leadership in the RN*. This AFCAS analysis found 'the following leadership behaviours of immediate line management all had a positive effect on general wellbeing and intention to stay: Tells me what's going on at work; Understands and represents my interests; Sets a positive example; Supports me in my job; Is supportive over work/life balance issues; Encourages me to develop my skills; Recognises my efforts. Of note perception of leadership is not part of the general wellbeing factor so these results are not an effect of general happiness – *the day to day leadership behaviours of immediate line managers does impact on the wellbeing and morale of our people as well as their intention to stay.*'

<sup>viii</sup> Davies, S (2015). *Ratings / Other Ranks' Exit Interview Pro-Forma Analysis: Wave 3*. Findings included the need to: Improve the impact of Service policies and process on an individual's personal and family life; Improve organisational support through a coaching and mentoring culture, personal and career development opportunities, and job satisfaction; Improve basic managerial relationships and support.

<sup>ix</sup> 'Made in the Royal Navy' is hugely successful (led to a 50% increase in initial expressions of interest) because it speaks directly to the activities, aspirations and behaviours shown to motivate – growth, achievement, recognition, responsibility. (see Herzberg, Maslow, McGregor).

<sup>x</sup> AFCAS reports that despite 75% (RN) – 80% (RM) of our people being proud to be in the Service – 67% reported low morale (a 7% increase on 2014), only a 1/3 felt valued by the Service, only 20% believed the senior leadership understood or represented them, and our Naval Ratings are the least satisfied with service life across all Services (at 36%).

<sup>xi</sup> 2SL/2005/CLM dated 19 May 05 'The Headmark of a Competency Based Approach to Command Leadership and Management (CLM) Selection, Training and Development' reported that analysis of OJAR showed Overall Performance was anchored primarily to Professional Effectiveness (achievement of tasks) rather than Leadership. It noted *'although this supports the 'Getting Things Done' ethos it is important for Reporting Officers to discriminate bullying commanders who routinely achieve the task at the expense of subordinates, from real leaders who achieve the task through delivering competent and committed team members'*. A 2015 study of Senior Officers found the same phenomenon.

<sup>xii</sup> The recent change to the definition of merit has added more emphasis to 'getting things done' – rather than caring for and developing people – which all the evidence shows would be more helpful in meeting our challenges of morale, retention and growth.

<sup>xiii</sup> The proposed changes to OJAR are removing the attribute Subordinate Development – sending an unhelpful signal about the value of people; and precluding our ability to assess or incentivise good leadership, learning, and self-awareness.

<sup>xiv</sup> Dualisms such as this table are regularly used in Organisation Development theory because such bi-polar concepts 'are powerful simplifiers and attention directors' (Pettigrew 2001, p. S61). However it is important to note there is no suggestion that the 'task-centred' column need be totally eschewed – but the 'reset' of more people-focused leadership is needed for growth to occur.



## 1SL Fellowship Growth Project – Research Brief

### **Introduction**

The following summary is intended to highlight research outcomes from Lt Cdr Offord's PhD study of Leadership and Sea Command which are pertinent to the question of growth in the RN. The following points are highly simplified findings from the study with the aim of providing a brief and concise summary.

### **The growth question**

The team have been tasked to consider new behaviours or culture within the context of naval growth. However the planned growth is modest and does not appear to, of itself, warrant a change of behaviour (unless there is already problem). The question may be re-phrased to consider how can we retain our current personnel or, perhaps, how do we reframe our culture to deal with the growth of capability (aircraft carriers) rather than personnel. In either case greater innovation will be required at all levels requiring a move of 'power to the edge' (Albert and Heyes 2003). This is because operating aircraft carriers with manpower levels of at least half of that required last time the RN operated vessels of comparable size will require a new paradigm. Technology can answer many operational problems but fundamentally personnel will need to be more autonomous and therefore empowered.

### **People-centred leadership**

The following points are raised by Lt Cdr Offord's research:

- Leadership Studies (and leadership in the military especially) is historically aimed at leadership traits. However a lot of recent research suggest that this is not the whole picture: the ability of leaders to project their will onto followers is unlikely to be the whole picture. Processes of interaction provide more satisfactory explanations of leadership.
- Research into the interaction (people skills) competence (Young and Dulewicz 2003,2005,2006,2007,2008,2009) has resulted in a process of contested leadership whereby leadership is granted following long term (and mundane) encounters which build up leaders' prestige.
- Prestige has been shown to support superior performance (e.g. increasing the odds of achieving a VSAT at OST). It also vastly improves the probability that information within a team is efficiently transmitted (critical for C2).
- Channels for prestige building are: professional credibility, personal approachability, participation in sports, socialising, store ship, scrubbing out etc.
- Prestigious leaders are not necessarily charismatic or obviously hold leadership qualities that are 'heroic' in nature. Prestige is built up over

time and in fairly mundane ways (e.g. walking 2 deck, chatting in the Galley, playing 5-a-side).

## **Conclusion**

People centred leadership is not an alternative to C2 styles of leadership but it complements it. Spending the time to build teams means those teams work better when the C2 style is required. It also means the team can be more agile and autonomous when the need arises.

# List of References

- Adair, J. (2002), *Inspiring Leadership-Learning from Great Leaders*, London: Thorogood Publishing.
- Adair, J. E. (1973), *Action-centred leadership*, New York: McGraw-Hill.
- Aldenderfer, M. (2005), 'Preludes to Power in the Highland Late Preceramic Period', *Archeological Papers from the American Anthropological Association* **14**, 13–35.
- Antonakis, J., Day, D. V. and Schyns, B. (2012), 'Leadership and individual differences: At the cusp of a renaissance', *The Leadership Quarterly* **23**(4), 643–650.
- Asch, S. E. (1948), 'The doctrine of suggestion, prestige and imitation in social psychology.', *Psychological Review* **55**(5), 250–276.
- Atkisson, C., O'Brien, M. J. and Mesoudi, A. (2012), 'Adult learners in a novel environment use prestige-biased social learning', *Evolutionary Psychology* **10**(3), 519–537.
- Baldwin, T. T., Bedell, M. D. and Johnson, J. L. (1997), 'the Social Fabric of a Team-Based M.B.A. Program: Network Effects on Student Satisfaction and Performance.', *Academy of Management Journal* **40**(6), 1369–1397.
- Balkundi, P. and Kilduff, M. (2005), 'The ties that lead: A social network approach to leadership', *The Leadership Quarterly* **16**(6), 941–961.
- Balkundi, P., Kilduff, M. and Harrison, D. A. (2011), 'Centrality and charisma: comparing how leader networks and attributions affect team performance.', *Journal of Applied Psychology* **96**(6), 1209–22.
- Barkow, J. H., Akiwowo, A. A., Barua, T. K., Chance, M. R. A., Chapple, E. D., Chattopadhyay, G. P., Freedman, D. G., R., G. W., B.B., G., P.A.C., I., Knudson, M. S., Manson, S. M., Parker, Christopher, E., Price, J. A. and Sarles, H. B. (1975), 'Prestige and Culture: A Biosocial Interpretation.', *Current Anthropologist* **16**(4), 553 – 572.
- Baron, R. A. (1970), 'Attraction toward the model and model's competence as determinants of adult imitative behavior.', *Journal of personality and social psychology* **14**(4), 345.
- Bass, B. M. (1985), *Leadership and performance beyond expectations*, New York:Free Press.
- Bass, B. M. (1998), *Transformational Leadership . Industrial, Military and Educational Impact.*, London: Lawrence Erlbaum Associates.

- Bass, B. M. and Avolio, B. J. (1990), *Transformational leadership development: Manual for the multifactor leadership questionnaire*, Palo Alto, CA: Consulting Psychologists Press.
- Bass, B. M. and Bass, R. (2008), *The Bass Handbook of Leadership. Theory, Research and Management Applications.*, 4th edn, New York: Free Press.
- Bavelas, A. (1950), 'Communication Patterns in Task-Oriented Groups', *Journal of the Acoustical Society of America* (May 2013), 725–730.
- Bazeley, P. (2007), *Qualitative Data Analysis with NVivo*, London: Sage Publications.
- Benton, T. (1981), "Objective" Interests and the Sociology of Power.', *Sociology* **15**(2), 161–184.
- Berger, J., Rosenholtz, S. J. and Zelditch Jr, M. (1980), 'Status Organizing', *Annual Review of Sociology* **6**, 479–508.
- Bickman, L. (1971), 'The Effect of Social Status on the Honesty of Others', *Journal of Social Psychology* **85**(1).
- Bligh, M. C., Kohles, J. C. and Meindl, J. R. (2004), 'Charisma under crisis: Presidential leadership, rhetoric, and media responses before and after the September 11th terrorist attacks', *Leadership Quarterly* **15**(2), 211–239.
- Bligh, M. C., Kohles, J. C. and Pillai, R. (2011), 'Romancing leadership: Past, present, and future', *Leadership Quarterly* **22**, 1058–1077.
- Bligh, M. C. and Schyns, B. (2007), 'Leading questions: the romance lives on: contemporary issues surrounding the romance of leadership.', *Leadership* **3**(3), 343–360.
- Boehm, C. (1993), 'Egalitarian Behavior and Reverse Dominance', *Current Anthropology* **34**(3), 227–254.
- Boehm, C. (2001), *Hierarchy in the Forest. The Evolution of Egalitarian Behaviour.*, Cambridge: Harvard University Press.
- Boehm, C. and Flack, J. (2010), Emergence of Power Structures through Niche Construction., in A. Guinote and K. T. Vescio, eds, 'Social Psychology of Power.', New York: The Guildford Press, chapter 2, pp. 46 – 86.
- Bolden, R. (2011), 'Distributed leadership in organizations: A review of theory and research', *International Journal of Management Review* **13**(3), 251–269.
- Bono, J. E. and Anderson, M. H. (2005), 'The advice and influence networks of transformational leaders.', *Journal of Applied Psychology* **90**(6), 1306–1314.
- Bono, J. E., Foldes, H. J., Vinson, G. and Muros, J. P. (2007), 'Workplace emotions: the role of supervision and leadership.', *Journal of Applied Psychology* **92**(5), 1357–1367.
- Bono, J. E., Hooper, A. C. and Yoon, D. J. (2012), 'Impact of rater personality on transformational and transactional leadership ratings', *Leadership Quarterly* **23**(1), 132–145.

- Bowles, S. (2009), 'Did warfare among ancestral hunter-gatherers affect the evolution of human social behaviors?', *Science* **324**(5932), 1293–8.
- Boyatzis, R. E. (2008), 'Competencies in the 21st century', *Journal of Management Development* **27**(1), 5–12.
- Bradshaw, A. (1976), 'A Critique of Steven Lukes' "Power: A Radical View."', *Sociology* **10**(1), 121–127.
- Brass, D. J. (1984), 'Being in the Right Place: A Structural Analysis of Individual Influence in an Organization', *Administration Science Quarterly* **29**(4), 518.
- Brass, D. J. and Burkhardt, M. E. (1993), 'Potential Power and Power Use: An Investigation of Structure', *Academy of Management Journal* **36**(3), 441–470.
- Brass, D. J., Butterfield, K. D. and Skaggs, B. C. (1998), 'Relationships and Unethical Behavior: A Social Network Perspective', *Academy of Management Review* **23**(1), 14.
- Brehm, S. S. and Brehm, J. W. (2013), *Psychological reactance: A theory of freedom and control*, New York: Academic Press.
- Briggs, J. L. (1970), *Never in Anger. Portrait of an Eskimo Family*, Cambridge: Harvard University Press.
- Bryman, A. and Bell, E. (2011), *Business Research Methods 3e*, Oxford: Oxford University Press.
- Burns, J. M. (1978), *Leadership*, New York: Harper & Row.
- Casimir, G., Ng, K., Wang, K. and Ooi, G. (2014), 'The relationships amongst leader-member exchange , perceived organizational support , affective commitment , and in-role performance : a social-exchange perspective', *Leadership Organisational Development Journal* .
- Cavazotte, F., Moreno, V. and Hickmann, M. (2012), 'Effects of leader intelligence, personality and emotional intelligence on transformational leadership and managerial performance', *Leadership Quarterly* **23**(3), 443–455.
- Cervone, D. and Pervin, L. A. (2015), *Personality: Theory and Research*, John Wiley & Sons.
- Chiniara, M. and Bentein, K. (2016), 'Linking servant leadership to individual performance: Differentiating the mediating role of autonomy, competence and relatedness need satisfaction', *Leadership Quarterly* **27**(1), 124–141.
- Cho, Y. J., Thrasher, J. F., Swayampakala, K., Yong, H.-H., McKeever, R., Hammond, D., Anshari, D., Cummings, K. M., Borland, R., Hammond, D., Fong, G., McDonald, P., Cameron, R., Brown, K., Hammond, D., Fong, G., McNeill, A., Borland, R., Cummings, K., Kees, J., Burton, S., Andrews, J., Kozup, J., Shanahan, P., Hammond, D., Fong, G., Borland, R., Cummings, K., McNeill, A., Driezen, P., Hammond, D., Noar, S., Hall, M., Francis, D., Ribisl, K., Pepper, J., Brewer, N., Gibson, L., Brennan, E., Momjian, A., Shapiro-Luft, D., Seitz, H., Cappella, J., Thrasher, J., Villalobos, V., Szklo, A., Fong, G., Perez, C., Sebrie, E., Ruiter, R., Kok, G., Witte, K., Witte, K., Brehm, S., Brehm, J., Rains, S., Turner, M., Grandpre, J., Alvaro, E.,

- Burgoon, M., Miller, C., Hall, J., Miller, C., Quick, B., Quick, B., Stephenson, M., Wiliam, N., Aaro, L., Hetland, J., Quick, B., Scott, A., Ledbetter, A., Dillard, J., Shen, L., Xu, J., Erceg-Hurn, D., Steed, L., Maynard, O., Attwood, A., O'Brien, L., Brooks, S., Hedge, C., Leonards, U., Peters, E., Romer, D., Slovic, P., Jamieson, K., Wharfield, L., Mertz, C., Emery, L., Romer, D., Sheerin, K., Jamieson, K., Peters, E., Borland, R., Wilson, N., Fong, G., Hammond, D., Cummings, K., Yong, H., Yong, H., Borland, R., Thrasher, J., Thompson, M., Nagelhout, G., Fong, G., Borland, R., Hammond, D., Fong, G., McDonald, P., Brown, K., Cameron, R., LaVoie, N., Quick, B., Riles, J., Lambert, N., Blanton, H., Snyder, L., Strauts, E., Larson, J., Thrasher, J., Swayampakala, K., Hammond, D., Bansal-Travers, M., Hardin, J., Yong, H.-H., Swayampakala, K., Thrasher, J., Hammond, D., Yong, H., Bansal-Travers, M., Krugman, D., O'Keefe, D., Quick, B., Thrasher, J., Osman, A., Abad-Vivero, E., Hammond, D., Bansal-Travers, M., Cummings, K., Heatherton, T., Kozlowski, L., Frecker, R., Rickert, W., Robinson, J., Thrasher, J., S, K., Cummings, K., Hammond, D., Anshari, D., Krugman, D., Hardin, J., Kees, J., Burton, S., Andrews, J., Kozup, J., Fathelrahman, A., Li, L., Borland, R., Yong, H., Omar, M., Awang, R., Wegner, D., Slovic, P., Finucane, M., Peters, E., MacGregor, D., Slovic, P., Peters, E., Peters, G., Ruiter, R., Kok, G., Petty, R. and Cacioppo, J. (2016), 'Does Reactance against Cigarette Warning Labels Matter? Warning Label Responses and Downstream Smoking Cessation amongst Adult Smokers in Australia, Canada, Mexico and the United States', *PLoS One* **11**(7).
- Chong, M. P. (2014), 'Influence behaviors and organizational commitment: a comparative study', *Leadership and Organisational Development Journal* **35**(1), 54–78.
- Chudek, M., Heller, S., Birch, S. and Henrich, J. (2012), 'Prestige-biased cultural learning: bystander's differential attention to potential models influences children's learning', *Evolution of Human Behaviour* **33**(1), 46–56.
- Ciulla, J. B. (2014), 'Searching for Mandela: The insights of biographical research', *Leadership* (September).
- Clarke, N. (2011), 'An integrated conceptual model of respect in leadership', *Leadership Quarterly* **22**(2), 316–327.
- Cleary, T. (1993), *Zen Lessons. The Art of Leadership*, London: Shambhala Publications.
- Colbert, A. E., Judge, T. A., Choi, D. and Wang, G. (2012), 'Assessing the trait theory of leadership using self and observer ratings of personality: The mediating role of contributions to group success', *Leadership Quarterly* **23**(4), 670–685.
- Collinson, D. (2005), 'Dialectics of leadership', *Human Relations* **58**(11), 1419–1442.
- Collinson, D. (2006), 'Rethinking followership: A post-structuralist analysis of follower identities', *Leadership Quarterly* **17**(2), 179–189.
- Collinson, D. (2012), 'Prozac leadership and the limits of positive thinking', *Leadership* **8**(2), 87–107.
- Collinson, D. L. (2002), 'Managing Humour', *Journal of Management Studies* **39**(3), 269–288.
- Contractor, N. S., DeChurch, L. A., Carson, J., Carter, D. R. and Keegan, B. (n.d.), *Leadership Quarterly*.

- Cooper, C. D., Scandura, T. A. and Schriesheim, C. A. (2005), 'Looking forward but learning from our past: Potential challenges to developing authentic leadership theory and authentic leaders', *Leadership Quarterly* **16**(3), 475–493.
- Corbin, J. M. and Strauss, A. (1990), 'Grounded theory research: Procedures, canons, and evaluative criteria', *Qualitative Sociology* **13**(1), 3–21.
- Creswell, J. W. (2009), *Research Design Qualitative, Quantitative, and Mixed Methods Approaches*, third edn, London: Sage Publications.
- Dansereau, F., Graen, G. and Haga, William, J. (1975), 'A Vertical Dyad Linkage Approach to Leadership within Formal Organizations A Longitudinal Investigation of the Role Making Process', *Organisational Behaviour and Human Performance* **13**, 46–78.
- DASA (2016), Royal Navy and Royal Marines. Trained Regular Strength by Branch at 1 Jan 2016, Technical report.
- Dehart-davis, A. L., Bozeman, B., Dehart-davis, L., Bozeman, B. and Tech, G. (2001), 'Regulatory Compliance and Air Quality Permitting : Why Do Firms Overcomply ?', *Journal of Public Administration Theory* **11**(4).
- DeRue, D. S., Nahrgang, J. D., Wellman, N. and Humphrey, S. E. (2011), 'Trait and behavioral theories of leadership: An integration and meta-analytic test of their relative validity', *Personnel Psychology* **64**(1), 7–52.
- Dick, P. and Collings, D. G. (2014), 'Discipline and punish? Strategy discourse, senior manager subjectivity and contradictory power effects', *Human Relations* **67**(12), 1513–1536.
- Dierendonck, D. (2011), 'Servant Leadership: a review and synthesis', *Journal of Management* **37**(4), 1228–1261.
- Digman, J. M. (1989), 'Five robust trait dimensions: development, stability, and utility.', *Journal of Personality* **57**(2), 195–214.
- Dinh, J. E. and Lord, R. G. (2012), 'Implications of dispositional and process views of traits for individual difference research in leadership', *Leadership Quarterly* **23**(4), 651–669.
- Dionne, S. D., Chun, J. U., Hao, C., Serban, A., Yammarino, F. J. and Spangler, W. D. (2012), 'Article quality and publication impact via levels of analysis incorporation: An illustration with transformational/charismatic leadership', *Leadership Quarterly* **23**(6), 1012–1042.
- Dulebohn, J. H., Bommer, W. H., Liden, R. C., Brouer, R. L. and Ferris, G. R. (2012), 'A Meta-Analysis of Antecedents and Consequences of Leader-Member Exchange: Integrating the Past With an Eye Toward the Future', *Journal of Management* **38**(6), 1715–1759.
- Dulewicz, V. and Higgs, M. (2000), 'Emotional intelligence - A review and evaluation study', *Journal of Management Psychology* **8**(5), 341–372.
- Dulewicz, V. and Higgs, M. (2005), 'Assessing leadership styles and organisational context', *Journal of Management Psychology* **20**(2), 105–123.

- Edu-Valsania, S., Moriano, J. A. and Molero, F. (2016), 'Authentic leadership and employee knowledge sharing behaviour: Mediation of the innovation climate and workgroup identification', *Leadership and Organisational Development Journal* **37**(4), 487–506.
- Edwards, G. (n.d.), *Leadership* .
- Edwards, G. and Gill, R. (2012), 'Transformational leadership across hierarchical levels in uk manufacturing organizations', *Leadership & Organization Development Journal* **33**(1), 25–50.
- Edwards, G., Schyns, B., Gill, R. and Higgs, M. (2012), 'The MLQ factor structure in a UK context', *Leadership and Organisational Development Journal* .
- Eerkens, J. W. (2009), Privatisation of Resources and the Evolution of Prehistoric Leadership Strategies, in K. J. Vaughn, J. W. Eerkens and J. Kanter, eds, 'Evolutionary Leadership Transitions: Decision Making from Small-Scale to Middle-Range Societies', Santa Fe: SAR Press, chapter 4, pp. 73–97.
- Eerkens, J. W., Vaughn, K. J. and Kanter, J. (2009), The Evolution of Leadership, in K. J. Vaughn, J. W. Eerkens and J. Kanter, eds, 'Evolutionary Leadership Transitions: Decision Making from Small-Scale to Middle-Range Societies.', Santa Fe: SAR Press, chapter 1.
- Eisenbeiß, S. A. and Boerner, S. (2013), 'A Double-edged Sword: Transformational Leadership and Individual Creativity', *British Journal of Management* **24**(1), 54–68.
- Eisenbeiß, S. a., van Knippenberg, D. and Boerner, S. (2008), 'Transformational leadership and team innovation: integrating team climate principles.', *Journal of Applied Psychology* **93**(6), 1438–1446.
- Engle, E. M. and Lord, R. G. (1997), 'Implicit Theories, Self Schemas, and Leader-Member Exchange', *Academy of Management Journal* **40**(4).
- Epitropaki, O. and Martin, R. (2013), 'Transformational and transactional leadership and upward influence: The role of Relative Leader-Member Exchanges (RLMX) and Perceived Organizational Support (POS)', *Leadership Quarterly* **24**(2), 299–315.
- Erdogan, B. and Bauer, T. N. (2010), 'Differentiated leader-member exchanges: the buffering role of justice climate.', *Journal of Applied Psychology* **95**(6), 1104–1120.
- Erdogan, B., Liden, R. C. and Kraimer, M. L. (2006), 'Justice and Leader-Member Exchange: The Moderating Role of Organizational Culture', *Academy of Management Journal* **49**(2), 395–406.
- Eskridge, B. E., Valle, E. and Schlupp, I. (2015), 'Emergence of Leadership within a Homogeneous Group', *PLoS One* **10**(7).
- Felfe, J. and Petersen, L.-E. (2007), 'Romance of leadership and management decision making', *European Journal of Work and Organisational Psychology* **16**(1), 1–24.
- Felfe, J. and Schyns, B. (2006), 'Personality and the perception of transformational leadership: The impact of extraversion, neuroticism, personal need for structure, and occupational self-efficacy', *Journal of Applied Social Psychology* **36**(3), 708–739.



- Felfe, J. and Schyns, B. (2010), 'Followers' personality and the perception of transformational leadership: Further evidence for the similarity hypothesis', *British Journal of Management* **21**(2), 393–410.
- Fiedler, F. E. et al. (1964), 'A contingency model of leadership effectiveness', *Advances in Experimental Social Psychology* **1**(1), 149–190.
- Flack, J. C. (2012), 'Multiple time-scales and the developmental dynamics of social systems', *Philosophical Transactions of the Royal Society B (Biological Sciences)* **367**(1597), 1802–1810.
- Fleeson, W. (2001), 'Toward a structure- and process-integrated view of personality: Traits as density distributions of states', *Journal of Personality and Social Psychology* **80**(6), 1011–1027.
- Foucault, M. (1979), *Discipline and punish*, New York: Vintage Books.
- Freeman, L. C., Roeder, D. and Mulholland, R. (1980), 'Centrality in Social Networks :', *Social Networks* **2**, 119–141.
- French, J. R., Raven, B. and Cartwright, D. (1959), 'The bases of social power', *Classics of Organization Theory* pp. 311–320.
- Garson, D. G. (2014), *Logistic Regression: Binary and Multinomial*.
- Gatling, A., Hee Jung, A. K. and Jungsun, S. K. (2015), 'The effects of authentic leadership on turnover intention', *Leadership and Organisational Development Journal* **36**(8), 955–971.
- Gilbert, N. and Troitzsch, K. G. (2005), *Simulation for the Social Scientist*, second edn, Maiden Head: Open University Press, Maidenhead, Surrey.
- Gill, R. (2011), *Theory and practice of leadership*, second edn, London: SAGE.
- Graen, G. B. and Uhl-Bien, M. (1995), 'Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective', *Leadership Quarterly* **6**(2), 219–247.
- Graen, G. and Cashman, J. F. (1975), 'A role-making model of leadership in formal organizations: A developmental approach', *Leadership Frontiers* **143**, 165.
- Greenfield, N. and Kuznicki, J. T. (1975), 'Implied Competence, Task Complexity and Imitative Behaviour', *Journal of Social Psychology* **95**(2), 251–261.
- Greenleaf, R. K. (2002), *Servant Leadership. A journey into the nature of legitimate power and greatness*, 25th anniv edn, Paulist Press, New York.
- Grint, K. (2005), 'Problems, problems, problems: The social construction of 'leadership'', *Human Relations* **58**(11), 1467–1494.
- Grint, K. (2009), 'The Sacred in Leadership: Separation, Sacrifice and Silence', *Organisational Studies* **31**(1), 89–107.
- Grint, K. (2010), 'The cuckoo clock syndrome: Addicted to command, allergic to leadership', *European Management Journal* **28**(4), 306–313.

- Grint, K. (2014), 'The Hedgehog and the Fox: Leadership lessons from D-Day', *Leadership* **10**(2), 240–260.
- Gronn, P. (2000), 'A New Architecture for Leadership', *Educational Management Administration* **28**(3), 317–338.
- Gronn, P. (2002), 'Distributed leadership as a unit of analysis', *The Leadership Quarterly* **13**(4), 423–451.
- Gross, R. (2010), *Psychology. The Science of Mind and Behaviour*, sixth edn, London: Hodder Education.
- Heaney, S. (2000), *Beowulf*, New York: WW Norton & Company.
- Henrich, J. (2006), 'Costly punishment across human societies.', *Science* **312**(5781), 1767–70.
- Henrich, J. and Boyd, R. (1998), 'The Evolution of Conformist Transmission and the Emergence of Between-Group Differences', *Evolution of Human Behaviour* **19**(4), 215–241.
- Henrich, J. and Gil-White, F. J. (2001), 'The evolution of prestige: freely conferred deference as a mechanism for enhancing the benefits of cultural transmission.', *Evolution and Human Behaviour* **22**(3), 165–196.
- Hersey, P. and Blanchard, K. H. (1969), 'Life cycle theory of leadership.', *Training & Development Journal* .
- Hoffman, B. J., Bynum, B. H., Piccolo, R. F. and Sutton, A. W. (2011), 'Person-organization value congruence: How transformational leaders influence work group effectiveness', *Academy of Management Journal* **54**(4), 779–796.
- Hogan, R., Curphy, G. J. and Hogan, J. (1994), 'What we know about leadership. Effectiveness and personality.', *American Psychologist* **49**(6), 493–504.
- Hogan, R. and Kaiser, R. B. (2005), 'What We Know About Leadership.', *Review of General Psychology* **9**(2), 169–180.
- Hogue, M. and Lord, R. G. (2007), 'A multilevel, complexity theory approach to understanding gender bias in leadership', *Leadership Quarterly* **18**(4), 370–390.
- Hoppe, B. and Reinelt, C. (2010), 'Social network analysis and the evaluation of leadership networks', *Leadership Quarterly* **21**(4), 600–619.
- Hoyt, C. L. and Blascovich, J. (2007), 'Leadership Efficacy and Women Leaders' Responses to Stereotype Activation', *Group Processes and Intergroup Relations* **10**(4), 595–616.
- Hunter, S. T., Bedell-Avers, K. E. and Mumford, M. D. (2007), 'The typical leadership study: Assumptions, implications, and potential remedies', *Leadership Quarterly* **18**(5), 435–446.
- Jenkins, W. O. (1947), 'A review of leadership studies with particular reference to military problems.', *Psychological Bulletin* **44**(1), 54–79.

- Jones, S. and Gosling, J. (2005), *Nelson's Way: Leadership Lessons from the Great Commander*, London: Nicholas Brealey Publishing.
- Judge, T. A., Bono, J. E., Ilies, R. and Gerhardt, M. W. (2002), 'Personality and leadership: a qualitative and quantitative review.', *Journal of Applied Psychology* **87**(4), 765–780.
- Judge, T. A. and Piccolo, R. F. (2004), 'Transformational and transactional leadership: a meta-analytic test of their relative validity.', *Journal of Applied Psychology* **89**(5), 755–768.
- Kahn, W. A. (1990), 'Psychological conditions for personal engagement and disengagement at work.', *Academy of Management Journal* **33**(4), 692–725.
- Karp, T. (2013), 'Studying subtle acts of leadership', *Leadership* **9**(1), 3–22.
- Karp, T. (2014), 'Is willpower important in acts of leadership?', *Leadership* (March).
- Kendal, J., Giraldeau, L. A. and Laland, K. (2009), 'The evolution of social learning rules: Payoff-biased and frequency-dependent biased transmission', *Journal of Theoretical Biology* **260**(2), 210–219.
- Kendal, J., Tehrani, J. J. and Odling-Smee, J. (2011), 'Human niche construction in interdisciplinary focus.', *Philosophical Transactions of the Royal Society B (Biological Sciences)* **366**(1566), 785–92.
- King, A. J., Johnson, D. D. P. and Van Vugt, M. (2009), 'The origins and evolution of leadership.', *Current Biology* **19**(19), R911–6.
- Kitzinger, J. (1994), 'The methodology of focus groups: the importance of interaction between research participants', *Sociology of Health & Illness* **16**(1), 103–121.
- Kolaczyk, E. D. and Csárdi, G. (2014), *Statistical Analysis of Network Data with R.*, New York: Springer.
- Krueger, R. A. and Casey, M. A. (2009), *Focus Groups*, 4th edn, London: Sage Publications.
- Laland, K. N. and Brown, G. R. (2011), *Sense and Nonsense. Evolutionary perspectives on human behaviour*, Oxford: Oxford University Press.
- Larsson, M. and Lundholm, S. E. (2010), 'Leadership as work-embedded influence: A micro-discursive analysis of an everyday interaction in a bank', *Leadership* **6**(2), 159–184.
- Lavery, B. (2007), *The Royal Navy Officer's Pocket Book 1944*, London: Conway.
- Leavitt, B. Y. H. J. (1951), 'Some Effects of Certain Communication Patterns', *Journal of Abnormal Social Psychology* .
- Li, A. N. and Liao, H. (2014), 'How Do Leader Member Exchange Quality and Differentiation Affect Performance in Teams?', **99**(5), 847–866.
- Liden, R. C. and Wayne, S. J. (n.d.), *Academy of Management Journal* .
- Liden, R. C., Wayne, S. J. and Stilwell, D. (1993), 'A Longitudinal Study on the Early Development of Leader-Member Exchanges', *Journal of Applied Psychology* **78**(4), 662–674.

- Lindsay, A. D. (1935), *Plato's Republic*, Vol. 64, London: JM Dent & Sons.
- Long, J. S. and Freese, J. (2006), *Regression Models for Categorical Dependent Variables Using Stata*, second edn, College Station: Stata Corp, Texas.
- Lord, R. G., Brown, D. J. and Harvey, Jennifer L. and Hall, R. J. (2001), 'Contextual constraints on prototype generation and their multilevel consequences for leadership perceptions.', *Leadership Quarterly* **12**(May 1999), 311–338.
- Lord, R. G., de Vader, C. L. and Alliger, G. M. (1986), 'A meta-analysis of the relation between personality traits and leadership perceptions: An application of validity generalization procedures.', *Journal Applied Psychology* **71**(3), 402–410.
- Mann, R. D. (1959), 'A Review of the Relationships Between Personality and Performance in Small Groups', *Psychological Bulletin* **56**(4).
- Markham, S. E. (2012), 'The evolution of organizations and leadership from the ancient world to modernity: A multilevel approach to organizational science and leadership (OSL)', *Leadership Quarterly* **23**(6), 1134–1151.
- McClelland, D. C. (1973), 'Testing for competence rather than for "intelligence."', *American Psychologist* **28**(1), 1.
- McCormack, L. and Mellor, D. (2002), 'The Role of Personality in Leadership: An Application of the Five-Factor Model in the Australian Military', *Military Psychology* **14**(3), 179–197.
- McCrimmon, M. (2010), 'Why servant leadership is a bad idea', *Management Issues* **16**.
- McDonald, M. M., Navarrete, C. D. and Van Vugt, M. (2012), 'Evolution and the psychology of intergroup conflict: the male warrior hypothesis.', *Philosophical Transactions of the Royal Society B (Biological Sciences)* **367**(1589), 670–9.
- McElreath, R., Bell, A. V., Efferson, C., Lubell, M., Richerson, P. J. and Waring, T. (2008), 'Beyond existence and aiming outside the laboratory: estimating frequency-dependent and pay-off-biased social learning strategies.', *Philosophical Transactions of the Royal Society B (Biological Sciences)* **363**(1509), 3515–3528.
- Mehra, A., Dixon, A. L., Brass, D. J. and Robertson, B. (2006), 'The Social Network Ties of Group Leaders : Implications for Group Performance and Leader Reputation', *Organisational Science* **17**(1), 64–79.
- Mehra, A., Smith, B. R., Dixon, A. L. and Robertson, B. (2006), 'Distributed leadership in teams: The network of leadership perceptions and team performance', *Leadership Quarterly* **17**(3), 232–245.
- Meindl, J. R. (1985), 'The Romance of Leadership', *Science* **30**(1), 78–102.
- Meindl, J. R. (1995), 'The romance of leadership as a follower-centric theory: A social constructionist approach', *The Leadership Quarterly* **6**(3), 329–341.

- Meindl, J. R. and Ehrlich, S. B. (1987), 'The Romance of Leadership and the Evaluation of Organisational Performance', *Academy of Management Journal* **30**(1), 91–109.
- Mesoudi, A. (2008), 'An experimental simulation of the "copy-successful-individuals" cultural learning strategy: adaptive landscapes, producer–scrounger dynamics, and informational access costs', *Evolution of Human Behaviour* **29**(5), 350–363.
- Morgan, D. L. (1996), 'Focus groups', *Annual Review of Sociology* pp. 129–152.
- Munday, J. (2006), 'Identity in focus the use of focus groups to study the construction of collective identity', *Sociology* **40**(1), 89–105.
- Navy, R. (2010), 'Fact Sheet 6 : Future Force 2020 Royal Navy'.
- Navy, R. (2011a), 'Competencies required for success in Sea Command in designated assignments'.
- Navy, R. (2011b), 'Joint Doctrine Publication 0-10', *Jt. Doctrin. Publ.* p. 83.
- Newman, M., Barabási, A.-L. and Watts, D. J. (2006), *The Structure and Dynamics of Networks*, Woodstock: Princeton University Press, Princeton.
- Ng, K.-Y., Ang, S. and Chan, K.-Y. (2008), 'Personality and leader effectiveness: a moderated mediation model of leadership self-efficacy, job demands, and job autonomy.', *Journal of Applied Psychology* **93**(4), 733–743.
- Nicholson, N. (2005), 'Objections to evolutionary psychology: Reflections, implications and the leadership exemplar', *Human Relations* **58**(3), 393–409.
- Northhouse, P. (2004), *Leadership Theory and Practice*, 3rd edn, London: Sage Publications.
- Nyberg, D. and Sveningsson, S. (2014), 'Paradoxes of authentic leadership: Leader identity struggles', *Leadership* **5**(17), 1–19.
- Offord, M., Gill, R. and Kendal, J. (2016), 'Leadership between decks : a synthesis and development of engagement and resistance theories of leadership based on evidence from practice in Royal Navy warships', *Leadership and Organisational Development Journal* **37**.
- Parker, A., Gerbasi, A. and Porath, C. L. (2013), 'The effects of de-energizing ties in organizations and how to manage them', *Organisational Dynamics* **42**(2), 110–118.
- Partington, D. (2000), 'Building grounded theories of management action', *British Journal of Management* **11**(2), 91–102.
- Peng, C.-y. J., Lee, K. L. and Ingersoll, G. M. (2002), 'An Introduction to Logistic Regression Analysis and Reporting', *Journal of Educational Research* **2**(1).
- Peng, C.-Y. J. and So, T.-S. H. (2002), 'Logistic Regression Analysis and Reporting: A Primer', *Understanding Statistics* **1**(1), 31–70.
- Pfeffer, J. (1977), 'The Ambiguity of Leadership', *Academy of Management Journal* **2**(1), 104–112.

- Phillips, E. M. and Pugh, D. S. (2005), *How to get a PhD*, fourth edn, Maidenhead: Open University Press.
- Pugliese, F., Acerbi, A., Miglino, O. and Marocco, D. (2015), ‘Emergence of Leadership in a Group of Autonomous Robots’, *PLoS One* **10**(9), 36–39.
- Purvanova, R. K. and Bono, J. E. (2009), ‘Transformational leadership in context: Face-to-face and virtual teams’, *Leadership Quarterly* **20**, 343–357.
- Rich, B. L., Lepine, J. A. and Crawford, E. R. (2010), ‘Job Engagement: Antecedents and Effects on Job Performance’, *Academy of Management Journal* **53**(3), 617–635.
- Ridgeway, C. L. (1987), ‘Nonverbal Behavior , Dominance , and the Basis of Status in Task Groups’, *American Sociological Review* **52**(5), 683–694.
- Ridgeway, C. L. (2001), ‘Gender , Status , and Leadership’, *Journal of Social Issues* **57**(4), 637–655.
- Ridgeway, C. L. and Balkwell, J. W. (1997), ‘Group Processes and the Diffusion of Status Beliefs’, *Social Psychology Quarterly* **60**(1), 14–31.
- Rockstuhl, T., Dulebohn, J. H., Ang, S. and Shore, L. M. (2012), ‘Leader–Member Exchange (LMX) and Culture: A Meta-Analysis of Correlates of LMX Across 23 Countries.’, *Journal of Applied Psychology* **97**, 1097–1130.
- Rodrigues, S. and Collinson, D. L. (1995), ‘Having Fun?': Humour as Resistance in Brazil’, *Organisational Studies* **16**(5).
- Royal Navy (2010), ‘Sea Command’, *Defence Focus* p. 239.
- Scandura, T. A. and Schriesheim, C. A. (1994), ‘Leader-Member Exchange and Supervisor Career Mentoring as Complementary Constructs in Leadership Research’, *Academy of Management Journal* **37**(6), 1588–1602.
- Schriesheim, C. A., Castro, S. L. and Coglisier, C. C. (1999), ‘Leader-member exchange (LMX) research: A comprehensive review of theory, measurement, and data-analytic practices’, *Leadership Quarterly* **10**(1), 63–113.
- Schyns, B., Felfe, J. and Blank, H. (2007), ‘Is charisma hyper-romanticism? Empirical evidence from new data and a meta-analysis’, *Applied Psychology* **56**(4), 505–527.
- Schyns, B., Maslyn, J. M. and Veldhoven, M. P. V. (2012), ‘Can some leaders have a good relationship with many followers?: The role of personality in the relationship between Leader-Member Exchange and span of control’, *Leadership and Organisational Development Journal* **33**(6), 594–606.
- Schyns, B. and Sanders, K. (2007), ‘In the eyes of the beholder: Personality and the perception of leadership’, *Journal of Applied Social Psychology* **37**(10), 2345–2363.
- Smith, E. A. and Bird, R. L. B. (2000), ‘Turtle hunting and tombstone opening’, *Evolution of Human Behaviour* **21**, 245–261.

- Sonnenwald, D. H. and Pierce, L. G. (2000), 'Information behavior in dynamic group work contexts: interwoven situational awareness, dense social networks and contested collaboration in command and control', *Information Processing Management* **36**(3), 461–479.
- Sparrowe, R. T. and Liden, R. C. (1997), 'Process and Structure in Leader-Member Exchange', *Academy of Management Review* **22**(2), 522–552.
- Sparrowe, R. T. and Liden, R. C. (2005), 'Two Routes to Influence : Integrating Exchange and Social Network Perspectives', *Administrative Science Quarterly* **50**, 505–535.
- Sparrowe, R. T., Liden, R. C., Wayne, S. J. and Kraimer, M. L. (2001), 'Social Networks and the Performance of Individuals and Groups ', *Academy of Management Journal* **44**(2), 316–325.
- Spector, B. A. (2015), 'Carlyle, Freud, and the Great Man Theory more fully considered', *Leadership* **0**(0), 1–12.
- Spisak, B. R., Grabo, A. E., Arvey, R. D. and van Vugt, M. (2014), 'The age of exploration and exploitation: Younger-looking leaders endorsed for change and older-looking leaders endorsed for stability', *Leadership Quarterly* **25**(5), 805–816.
- Spisak, B. R., Homan, A. C., Grabo, A. and Van Vugt, M. (2012), 'Facing the situation: Testing a biosocial contingency model of leadership in intergroup relations using masculine and feminine faces', *Leadership Quarterly* **23**(2), 273–280.
- Spisak, B. R., O'Brien, M. J., Nicholson, N. and Van Vugt, M. (2015), 'Niche construction and the evolution of complexity', *Academy of Management Review* **40**(2), 291–306.
- St George, A. (2012), *Royal Navy Way of Leadership*, London: Preface Publishing.
- Stogdill, R. M. (1948), 'Personal factors associated with leadership: A survey of the literature.', *Journal of Psychology* **25**(1), 35–71.
- Sveiby, K. E. (2011), 'Collective leadership with power symmetry: Lessons from Aboriginal prehistory', *Leadership* **7**(4), 385–414.
- Tate, R. (2009), Critical Success Factors for Ship Command, Technical report.
- Torrance, E. P. (1957), 'Group Decision-Making and Disagreement', *Social Forces* **35**(4), 314–318.
- Uhl-Bien, M. (2006), 'Relational Leadership Theory: Exploring the social processes of leadership and organizing', *Leadership Quarterly* **17**(6), 654–676.
- Uhl-Bien, M., Marion, R. and McKelvey, B. (2007), 'Complexity Leadership Theory: Shifting leadership from the industrial age to the knowledge era', *Leadership Quarterly* **18**(4), 298–318.
- Van Dam, K., Oreg, S. and Schyns, B. (2008), 'Daily work contexts and resistance to organisational change: The role of leader-member exchange, development climate, and change process characteristics', *Applied Psychology* **57**(2), 313–334.
- van der Kam, N. A., Janssen, O., van der Vegt, G. S. and Stoker, J. I. (2014), 'The role of vertical conflict in the relationship between leader self-enhancement and leader performance', *Leadership Quarterly* **25**(2), 267–281.

- Van der Linden, D., Tsaousis, I. and Petrides, K. V. (2012), 'Overlap between General Factors of Personality in the Big Five, Giant Three, and trait emotional intelligence', *Personality and Individual Differences* **53**(3), 175–179.
- Van Vugt, M. (2009), 'Despotism, democracy, and the evolutionary dynamics of leadership and followership.', *American Psychologist* **64**(1), discussion 54–6.
- Van Vugt, M. and Ahuja, A. (2010), *Selected. Why some people lead, why others follow, and why it matters.*, London: Profile Books.
- Van Vugt, M., Hogan, R. and Kaiser, R. B. (2008), 'Leadership, followership, and evolution: some lessons from the past.', *American Psychologist* **63**(3), 182–96.
- Venkataramani, V. and Green, Stephen G. and Schleicher, D. J. (2010), 'Well-connected leaders: the impact of leaders' social network ties on LMX and members' work attitudes.', *Journal of Applied Psychology* **95**(6), 1071–84.
- Vogelgesang, G. R., Leroy, H. and Avolio, B. J. (2013), 'The mediating effects of leader integrity with transparency in communication and work engagement/performance', *Leadership Quarterly* **24**(3), 405–413.
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S. and Peterson, S. J. (2008), 'Authentic Leadership: Development and Validation of a Theory-Based Measure', *Journal of Management* **34**, 89–126.
- Wasserman, S. and Faust, K. (1994), *Social Network Analysis: Methods and Applications*, Cambridge: Cambridge University Press.
- Wayne, S. J., Shore, L. M. and Liden, R. C. (2010), 'Perceived Organizational Support and Leader-Member Exchange : a Social Exchange Perspective', **40**(1), 82–111.
- Weick, K. E. and Roberts, K. H. (1993), 'Collective Mind in Organizations - Heedful Interrelating on Flight Decks.', *Administration Science Quarterly* **38**(3), 357–381.
- Williams, H. (2008), 'Characteristics that distinguish outstanding urban principals: Emotional intelligence, social intelligence and environmental adaptation', *Journal of Management Development* **27**(1), 36–54.
- Wilson, K., Sin, H. P. and Conlon, D. (2010), 'What about the leader in leader-member exchange? the impact of resource exchanges and substitutability on the leader', *Academy of Management Review* **35**(3), 358–372.
- Wong, L., Bliese, P. and McGurk, D. (2003), 'Military leadership: A context specific review', *Leadership Quarterly* **14**(6), 657–692.
- Xu, J. and Thomas, H. C. (2011), 'How can leaders achieve high employee engagement?', *Leadership and Organisational Development Journal* **32**(4), 399–416.
- Xu, L., Fu, P., Xi, Y., Zhang, L., Zhao, X., Cao, C. and Liao, Y. (2014), 'Adding dynamics to a static theory : How leader traits evolve and how they are expressed', *Leadership Quarterly* **25**(6), 1095–1119.



- Yammarino, F. J. and Dansereau, F. (2011), ‘Multi-level issues in evolutionary theory, organization science, and leadership’, *Leadership Quarterly* **22**(6), 1042–1057.
- Young, M. and Dulewicz, V. (2005), ‘A model of command, leadership and management competency in the british royal navy’, *Leadership & Organization Development Journal* **26**(3), 228–241.
- Young, M. and Dulewicz, V. (2006), ‘Leadership styles, change context and leader performance in the royal navy’, *Journal of Change Management* **6**(4), 383–396.
- Young, M. and Dulewicz, V. (2007), ‘Relationships between emotional and congruent self-awareness and performance in the british royal navy’, *Journal of Managerial Psychology* **22**(5), 465–478.
- Young, M. and Dulewicz, V. (2008), ‘Similarities and differences between leadership and management: High-performance competencies in the british royal navy’, *British Journal of Management* **19**(1), 17–32.
- Young, M. and Dulewicz, V. (2009), ‘A study into leadership and management competencies predicting superior performance in the british royal navy’, *Journal of Management Development* **28**(9), 794–820.
- Zaccaro, S. J. (2007), ‘Trait-based perspectives of leadership.’, *American Psychologist* **62**(1), 6–16.
- Zaccaro, S. J. (2012), ‘Individual differences and leadership: Contributions to a third tipping point’, *Leadership Quarterly* **23**(4), 718–728.
- Zhang, Z. and Peterson, S. J. (2011), ‘Advice networks in teams: The role of transformational leadership and members’ core self-evaluations.’, *Journal of Applied Psychology* **96**(5), 1004–1017.
- Zhang, Z., Wang, M. and Shi, J. (2012), ‘Leader-follower congruence in proactive personality and work outcomes: The mediating role of leader-member exchange’, *Academy of Management Journal* **55**(1), 111–130.
- Zhu, W., Avolio, B. J., Riggio, R. E. and Sosik, J. J. (2011), ‘The effect of authentic transformational leadership on follower and group ethics’, *Leadership Quarterly* **22**, 801–817.
- Zhu, Y. and Akhtar, S. (2014), ‘How transformational leadership influences follower helping behavior: The role of trust and prosocial motivation’, *Journal of Organizational Behavior* **35**(3), 373–392.